FEDERAL REGISTER Published daily, Monday through Friday, (not published on Saturdays, Sundays, or on official holidays), by the Office of the Federal Register, National Archives and Records Administration, Washington, DC 20408, under the Federal Register Act (49 Stat. 500, as amended: 44 U.S.C. Ch. 15) and the regulations of the Administrative Committee of the Federal Register (1 CFR Ch. 1). Distribution is made only by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

The Federal Register provides a uniform system for making available to the public regulations and legal notices issued by Federal agencies. These include Presidential proclamations and Executive Orders and Federal agency documents having general applicability and legal effect, documents required to be published by act of Congress and other Federal agency documents of public interest. Documents are on file for public inspection in the Office of the Federal Register the day before they are published, unless earlier filing is requested by the issuing agency.

The Federal Register will be furnished by mail to subscribers for $340.00 per year, or $170.00 for 6 months, payable in advance. The charge for individual copies is $1.50 for each issue, or $1.50 for each group of pages as actually bound. Remit check or money order, made payable to the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

There are no restrictions on the republication of material appearing in the Federal Register.

Questions and requests for specific information may be directed to the telephone numbers listed under INFORMATION AND ASSISTANCE in the READER AIDS section of this issue.

How To Cite This Publication: Use the volume number and the page number. Example: 52 FR 12345.
Agricultural Marketing Service

RULES
Lemons grown in California and Arizona, 12511
Oranges (navel) grown in Arizona and California, 12511
Pears, plums, and peaches grown in California, 12512
Potatoes (Irish) grown in Colorado, 12513
Raisins produced from grapes grown in California, 12515
PROPOSED RULES
Lemons grown in California and Arizona, 12536
Milk marketing orders:
  Southern Michigan, 12537
  Southwest Plains, 12538
Oranges (Valencia) grown in Arizona and California, 12535

Agriculture Department
See Agricultural Marketing Service; Animal and Plant Health Inspection Service; Farmers Home Administration; Food and Nutrition Service; Food Safety and Inspection Service

Animal and Plant Health Inspection Service

NOTICES
Committees; establishment, renewals, terminations, etc.:
  National Animal Damage Control Advisory Committee, 12576

Army Department
See also Engineers Corps

NOTICES
Meetings:
  Science Board, 12580
  (2 documents)

Arts and Humanities, National Foundation
See National Foundation on the Arts and the Humanities

Blind and Other Severely Handicapped, Committee for Purchase From
See Committee for Purchase From the Blind and Other Severely Handicapped

Bonneville Power Administration

NOTICES
Transmission and wholesale power rates:
  Proposed revision, 12582

Centers for Disease Control

NOTICES
Fatal accident circumstances and epidemiology; NIOSH meeting, 12504

Commerce Department
See International Trade Administration; National Oceanic and Atmospheric Administration

Committee for Purchase From the Blind and Other Severely Handicapped

NOTICES
Procurement list, 1987:
  Additions and deletions, 12579

Conservation and Renewable Energy Office

NOTICES
Grants; availability, etc.:
  Research and development cooperative ventures, 12590

Consumer Product Safety Commission

NOTICES
Meetings; Sunshine Act, 12638
  (2 documents)

Defense Department
See also Army Department; Engineers Corps

NOTICES
Meetings:
  Science Board task forces, 12580

Drug Enforcement Administration

NOTICES
Applications, hearings, determinations, etc.:
  Romers, William D., D.D.S., 12621

Economic Regulatory Administration

NOTICES
Natural gas exportation and importation:
  Spot Market Corp., 12582
Powerplant and industrial fuel use; prohibition orders, exemption requests, etc.:
  Prime Energy Limited Partnership, 12583

Education Department

NOTICES
Meetings:
  Continuing Education National Advisory Council, 12581

Employment and Training Administration

NOTICES
Adjustment assistance:
  American Motors Corp. et al., 12622
  Carrier Corp., 12625
  Dover Elevator Systems, Inc., 12625
  Enduro Stainless, Inc., 12626
  Perrella Gloves, Inc., 12626
  Zenith Electronics Corp., 12626

Employment Standards Administration

NOTICES
Minimum wages for Federal and federally-assisted construction; general wage determination decisions, 12627

Energy Department
See Bonneville Power Administration; Conservation and Renewable Energy Office; Economic Regulatory Administration; Energy Information Administration; Federal Energy Regulatory Commission

Energy Information Administration

NOTICES
Reporting and recordkeeping requirements, 12584
Engineers Corps
NOTICES
Meetings:
Coastal Engineering Research Board, 12581

Environmental Protection Agency
RULES
Air quality implementation plans; approval and promulgation; various States:
California, 12522
North Carolina, 12523
Pesticide chemicals in or on raw agricultural commodities; tolerances and exemptions, etc.: Sodium salt of fomesafen, 12525
PROPOSED RULES
Air pollution control; new motor vehicles and engines:
Emission control system performance warranty, etc.:
Maryland; alternative quality control procedures, 12561
New York; alternative quality control procedures, 12563
Hazardous waste:
Treatment, storage, and disposal facilities—
Minimum technology requirements, 12566
Underground storage tanks—
Financial responsibility requirements, 12786
State program approval, 12853
Technical requirements, 12662
Water pollution control:
National primary drinking water regulations—
Volatile synthetic organic chemicals; para-dichlorobenzene, 12576
NOTICES
Environmental statements; availability, etc.:
Agency statements—
Comment availability, 12593
Weekly receipts, 12592
Pesticides; emergency exemption applications:
Benomyl, 12593
Dinoseb, 12594
Oxyfluorfen, 12596
Superfund program:
Hazardous substances priority list [toxicological profiles], 12666
Toxicological profiles development; guidelines, 12870
Toxic and hazardous substances control:
Premanufacture exemption approvals, 12597
Premanufacture notices receipts, 12598
Water pollution control; sole source aquifer designations:
Virginia, 12600

Equal Employment Opportunity Commission
NOTICES
Meetings; Sunshine Act, 12838

Farmers Home Administration
PROPOSED RULES
Loan and grant programs:
Community facility loans, 12539

Federal Aviation Administration
RULES
Airworthiness directives:
Bell Helicopter Textron, Inc., 12517
Messerschmitt-Bolkow-Blohm GmbH, 12518
Rolls-Royce plc, 12519
Standard instrument approach procedures, 12519
PROPOSED RULES
Airworthiness directives:
Garrett, 12545
Teledyne Continental Motors, 12544
NOTICES
Meetings:
Aeronautics Radio Technical Commission, 12837

Federal Communications Commission
NOTICES
Meetings; Sunshine Act, 12838

Federal Election Commission
NOTICES
Meetings; Sunshine Act, 12839

Federal Emergency Management Agency
NOTICES
Agency information collection activities under OMB review, 12602
Disaster and emergency areas:
Maine, 12602

Federal Energy Regulatory Commission
NOTICES
Hydroelectric applications, 12586
Applications, hearings, determinations, etc.:
San Diego Gas & Electric Co., 12590
(2 documents)

Federal Reserve System
NOTICES
Meetings; Sunshine Act, 12639, 12640
(4 documents)
Applications, hearings, determinations, etc.:
Fidelcor, Inc., 12602
Hamptons Bancshares, Inc., et al., 12603
Scroggie, LaCinda Johnson, 12603
Sharon Bancshares, Inc., et al., 12603

Federal Trade Commission
PROPOSED RULES
Prohibited trade practices:
Volkswagen of America, Inc., et al., 12546

Fish and Wildlife Service
NOTICES
Endangered and threatened species permit applications, 12618

Food and Drug Administration
RULES
Animal drugs, feeds, and related products:
Ronnel, 12521
Human drugs:
Bronchodilator drug products (OTC): final monograph; correction, 12521

PROPOSED RULES
Food for human consumption:
Cheeses, mozzarella; identity standards, 12556

NOTICES
Animal drugs, feeds, and related products:
Dow Chemical U.S.A., ronnel Type A articles; approval withdrawn, 12604
Biological products:
Haemophilus influenza type B disease epidemiology; workshop, 12604
Human drugs:
Exclusivity petitions—
Dipyridamole, 12605
Medical devices:  
Condoms; defect action levels, labeling; compliance policy guide, 12605  
Intraocular lenses; adjunct studies report availability, 12606

Food and Nutrition Service  
PROPOSED RULES  
Child nutrition programs:  
Women, infants, and children; special supplemental food program; funding formula, 12527

Food Safety and Inspection Service  
RULES  
Meat and poultry inspection:  
Trichinosis in pork products; methods for destruction; correction, 12517

Health and Human Services Department  
See also Centers for Disease Control; Food and Drug Administration; Health Resources and Services Administration; Social Security Administration

NOTICES  
Superfund program:  
Hazardous substances priority list (toxicological profiles), 12866  
Toxicological profiles development; guidelines, 12870

Health Resources and Services Administration  
NOTICES  
Grants and cooperative agreements:  
Family medicine—  
Faculty development, 12607

Housing and Urban Development Department  
NOTICES  
Grants; availability, etc.:  
Rental rehabilitation program; formula allocations, etc., 12808

Indian Affairs Bureau  
NOTICES  
Liquor and tobacco sale or distribution ordinance:  
Turtle Mountain Band of Chippewa, ND, 12617

Interior Department  
See also Fish and Wildlife Service; Indian Affairs Bureau; Land Management Bureau; National Park Service

PROPOSED RULES  
Superfund and Clean Water Act:  
Natural resource damage assessments, 12866

International Broadcasting Board  
NOTICES  
Meetings; Sunshine Act, 12638

International Trade Administration  
NOTICES  
Export privileges, actions affecting:  
Bollinger GmbH et al., 12576  
Export trade certificates of review, 12578

Interstate Commerce Commission  
NOTICES  
Railroad operation, acquisition, construction, etc.:  
Duval Transportation of the Carolinas, Inc., 12619  
Haley, John E., et al., 12619

Justice Department  
See also Drug Enforcement Administration

NOTICES  
Pollution control; consent judgments:  
B.F. Goodrich Co., 12819  
Darshan's Gas, Inc., et al., 12620  
Geppert Bros. et al., 12620  
New Holland Borough et al., 12620  
Utility Trailer Manufacturing Co., 12621

Labor Department  
See Employment and Training Administration; Employment Standards Administration; Occupational Safety and Health Administration

Land Management Bureau  
NOTICES  
Meetings:  
Salt Lake District Grazing Advisory Board, 12617  
Realty actions; sales, leases, etc.:  
Nevada, 12617  
12618  
(2 documents)  
Recreation management restrictions, etc.:  
Medford District, OR; correction, 12641  
Withdrawal and reservation of lands:  
New Mexico; correction, 12641

Legal Services Corporation  
NOTICES  
Reports; availability, etc.:  
Migrant farmworkers: number and distribution, 12632

National Foundation on the Arts and the Humanities  
NOTICES  
Agency information collection activities under OMB review, 12632

National Institute for Occupational Safety and Health  
See Centers for Disease Control

National Labor Relations Board  
NOTICES  
Meetings; Sunshine Act, 12640

National Oceanic and Atmospheric Administration  
RULES  
Fishery conservation and management:  
Western Pacific pelagic; correction, 12641  
PROPOSED RULES  
Fishery conservation and management:  
Atlantic surf clam and ocean quahog, 12575  
NOTICES  
Coastal zone management programs and estuarine sanctuaries:  
National energy security study, 12578

National Park Service  
NOTICES  
Concession contract negotiations:  
International Leisure Hosts, Ltd., 12619

Nuclear Regulatory Commission  
NOTICES  
Meetings:  
Reactor Safeguards Advisory Committee, 12633  
Reports; availability, etc.:  
Nuclear power plant safety analysis report review, 12633  
(2 documents)
Occupational Safety and Health Administration

PROPOSED RULES
Health and safety standards, etc.
   Manual lifting, 12559

NOTICES
State plans; standards approval, etc.
   Oregon, 12628
   Washington, 12628

Variance applications, etc.
   Tomaro Contractors, Inc., 12629

Postal Service

PROPOSED RULES
Domestic Mail Manual:
   Combined presort and ZIP + 4 presort first-class mail, 12559

Public Health Service

See Centers for Disease Control; Food and Drug Administration; Health Resources and Services Administration

Securities and Exchange Commission

NOTICES
Applications, hearings, determinations, etc.
   FSA Capital, Inc., 12634
   Mrs. Fields, Inc., 12634

Selective Service System

RULES
Registrant processing
   Correction, 12641

Social Security Administration

NOTICES
Meetings:
   Disability Advisory Council, 12607

Tennessee Valley Authority

NOTICES
Meetings; Sunshine Act, 12640

Transportation Department

See Federal Aviation Administration

Treasury Department

RULES
Currency and foreign transactions; financial reporting and recordkeeping requirements; Bank Secrecy Act; implementation
   Correction, 12641

NOTICES
Committees; establishment, renewals, terminations, etc.
   Exempt Organizations Advisory Group, 12637

Reader Aids
Additional information, including a list of public laws, telephone numbers, and finding aids, appears in the Reader Aids section at the end of this issue.

Part V
Department of the Interior, 12886

Separate Parts in This Issue

Part II
Environmental Protection Agency, 12662

Part III
Environmental Protection Agency; Department of Health and Human Services, 12868

Part IV
Environmental Protection Agency, 12878

Part V
Department of the Interior, 12886
CFR PARTS AFFECTED IN THIS ISSUE

A cumulative list of the parts affected this month can be found in the Reader Aids section at the end of this issue.

<table>
<thead>
<tr>
<th>CFR</th>
<th>Proposed Rules:</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 CFR</td>
<td></td>
</tr>
<tr>
<td>907</td>
<td>12527</td>
</tr>
<tr>
<td>910</td>
<td>12511</td>
</tr>
<tr>
<td>917</td>
<td>12512</td>
</tr>
<tr>
<td>948</td>
<td>12513</td>
</tr>
<tr>
<td>989</td>
<td>12515</td>
</tr>
<tr>
<td>908</td>
<td>12535</td>
</tr>
<tr>
<td>910</td>
<td>12536</td>
</tr>
<tr>
<td>1040</td>
<td>12537</td>
</tr>
<tr>
<td>1106</td>
<td>12538</td>
</tr>
<tr>
<td>1942</td>
<td>12539</td>
</tr>
<tr>
<td>9 CFR</td>
<td></td>
</tr>
<tr>
<td>318</td>
<td>12517</td>
</tr>
<tr>
<td>14 CFR</td>
<td>39 (3 documents)</td>
</tr>
<tr>
<td>97</td>
<td>12519</td>
</tr>
<tr>
<td>1040</td>
<td>12519</td>
</tr>
<tr>
<td>16 CFR</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>12546</td>
</tr>
<tr>
<td>21 CFR</td>
<td></td>
</tr>
<tr>
<td>341</td>
<td>12521</td>
</tr>
<tr>
<td>558</td>
<td>12521</td>
</tr>
<tr>
<td>39</td>
<td>12544, 12545</td>
</tr>
<tr>
<td>29 CFR</td>
<td></td>
</tr>
<tr>
<td>1910</td>
<td>12559</td>
</tr>
<tr>
<td>1915</td>
<td>12559</td>
</tr>
<tr>
<td>1917</td>
<td>12559</td>
</tr>
<tr>
<td>1918</td>
<td>12559</td>
</tr>
<tr>
<td>1919</td>
<td>12559</td>
</tr>
<tr>
<td>1926</td>
<td>12559</td>
</tr>
<tr>
<td>1928</td>
<td>12559</td>
</tr>
<tr>
<td>31 CFR</td>
<td></td>
</tr>
<tr>
<td>103</td>
<td>12641</td>
</tr>
<tr>
<td>32 CFR</td>
<td></td>
</tr>
<tr>
<td>1630</td>
<td>12641</td>
</tr>
<tr>
<td>39 CFR</td>
<td></td>
</tr>
<tr>
<td>111</td>
<td>12559</td>
</tr>
<tr>
<td>40 CFR</td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>12522, 12523</td>
</tr>
<tr>
<td>180</td>
<td>12525</td>
</tr>
<tr>
<td>65</td>
<td>12561, 12563</td>
</tr>
<tr>
<td>141</td>
<td>12576</td>
</tr>
<tr>
<td>264</td>
<td>12586</td>
</tr>
<tr>
<td>265</td>
<td>12566</td>
</tr>
<tr>
<td>280</td>
<td>12662</td>
</tr>
<tr>
<td>281</td>
<td>12686</td>
</tr>
<tr>
<td>43 CFR</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>12886</td>
</tr>
<tr>
<td>50 CFR</td>
<td></td>
</tr>
<tr>
<td>685</td>
<td>12641</td>
</tr>
<tr>
<td>652</td>
<td>12575</td>
</tr>
</tbody>
</table>
DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service

7 CFR Part 907

[Navel Orange Reg. 656]

Navels Grown in Arizona and Designated Part of California; Limitation of Handling

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Final rule.

SUMMARY: Regulation 656 establishes the quantity of California- Arizona navel oranges that may be shipped to market during the period April 17-25, 1987. Such action is needed to balance the supply of fresh navel oranges with the demand for such period, due to the marketing situation confronting the orange industry.

DATE: Regulation 656 (§ 907.956) is effective for the period April 17-25, 1987 through April 23, 1987.


SUPPLEMENTARY INFORMATION: This final rule has been reviewed under Executive Order 12291 and Department Regulation 1512-1 and has been determined to be a "non-major" rule under criteria contained therein.

Pursuant to requirements set forth in the Regulatory Flexibility Act (RFA), the Administrator of the Agricultural Marketing Service has determined that this action will not have a significant economic impact on a substantial number of small entities.

The purpose of the RFA is to fit regulatory action to the scale of business subject to such actions in order that small businesses will not be unduly or disproportionately burdened.

Marketing orders issued pursuant to the Agricultural Marketing Agreement Act, and rules issued thereunder, are unique in that they are brought about through group action of essentially small entities acting on their behalf. Thus, both statutes have small entity orientation and compatibility.

This rule is issued under Order No. 907 as amended (7 CFR Part 907), regulating the handling of navel oranges grown in Arizona and designated part of California. The order is effective under the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601-974). This action is based upon the recommendation and information submitted by the Navel Orange Administrative Committee and upon available information. It is found that this action will tend to effectuate the declared policy of the act.

This action is consistent with the marketing policy for 1986-87 adopted by the Navel Orange Administrative Committee. The committee met publicly on April 14, 1987, in Lindsay, California, to consider the current and prospective conditions of supply and demand and recommended by a 9 to 1 vote a quantity of navel oranges deemed advisable to be handled during the specified week. The committee reports that the market for navel oranges is steady.

It is further found that it is impracticable and contrary to the public interest to give preliminary notice, engage in public rulemaking, and postpone the effective date until 30 days after publication in the Federal Register (5 U.S.C. 553), because of insufficient time between the date when information became available upon which this regulation is based and the effective date necessary to effectuate the declared policy of the act. To effectuate the declared purposes of the act, it is necessary to make this regulatory provision effective as specified; and handlers have been apprised of such provision and the effective time.

List of Subjects in 7 CFR Part 907

Agricultural Marketing Service, Marketing Agreements and Orders, California, Arizona, Oranges (Navel).

For the reasons set forth in the preamble, 7 CFR Part 907 is amended as follows:

PART 907—NAVEL ORANGES GROWN IN ARIZONA AND DESIGNATED PART OF CALIFORNIA

1. The authority citation for this part continues to read:


2. Section 907.956 Navel Orange Regulation 656 is added to read as follows:

§ 907.956 Navel Orange Regulation 656.

The quantities of navel oranges grown in California and Arizona which may be handled during the period April 17-25, 1987, are established as follows:

(a) District 1: 1,750,000 cartons;
(b) District 2: Unlimited cartons;
(c) District 3: Unlimited cartons;
(d) District 4: Unlimited cartons.


Ronald L. Cioffi,
Acting Deputy Director, Fruit and Vegetable Division, Agricultural Marketing Service.

[FR Doc. 87-8183 Filed 4-16-87; 8:45 am]
BILLING CODE 3410-02-M

7 CFR Part 910

[Lemon Reg. 557]

Lemons Grown in California and Arizona; Limitation of Handling

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Final rule.

SUMMARY: Regulation 557 establishes the quantity of fresh California- Arizona lemons that may be shipped to market at 315,000 cartons during the period April 19-25, 1987. Such action is needed to balance the supply of fresh lemons with market demand for the period specified, due to the marketing situation confronting the lemon industry.

DATES: Regulation 557 (§ 910.857) is effective for the period April 19-25, 1987.


SUPPLEMENTARY INFORMATION: This final rule has been reviewed under Executive Order 12291 and Department Regulation 1512-1 has
been determined to be a “non-major” rule under criteria contained therein.

Pursuant to requirements set forth in the Regulatory Flexibility Act (RFA), the Administrator of the Agricultural Marketing Service has determined that this action will not have a significant economic impact on a substantial number of small entities.

The purpose of the RFA is to fit regulatory actions to the scale of business subject to such actions in order that small businesses will not be unduly or disproportionately burdened.

Marketing orders issued pursuant to the Agricultural Marketing Agreement Act, and rules issued thereunder, are unique in that they are brought about through group action of essentially small entities acting on their behalf. Thus, both statutes have small entity orientation and compatibility.

This regulation is issued under Marketing Order No. 910, as amended (7 CFR Part 910) regulating the handling of lemons grown in California and Arizona. The order is effective under the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601-674).

This action is based upon the recommendation and information submitted by the Lemon Administrative Committee and upon other available information. It is found that this action will tend to effectuate the declared policy of the Act.

This regulation is consistent with the marketing policy for 1986-87. The committee met publicly on April 14, 1987 in Los Angeles, California, to consider the current and prospective conditions of supply and demand and recommend unanimously a quantity of lemons deemed advisable to be handled during the specified week. The committee reports that the market is very slow.

It is further found that it is impracticable and contrary to the public interest to give preliminary notice, engage in public rulemaking, and postpone the effective date until 30 days after publication in the Federal Register (5 U.S.C. 553), because of insufficient time between the date when information became available upon which this regulation is based and the effective date necessary to effectuate the declared purposes of the Act. Interested persons were given an opportunity to submit information and views on the regulation at an open meeting. It is necessary to effectuate the declared purposes of this Act to make these regulatory provisions effective as specified, and handlers have been apprised of such provisions and the effective time.

List of Subjects in 7 CFR Part 910
Marketing agreements and orders, California, Arizona, Lemons.

For the reasons set forth in the preamble, 7 CFR Part 910 is amended as follows:

PART 910—LEMONS GROWN IN CALIFORNIA AND ARIZONA
1. The authority citation for 7 CFR Part 910 continues to read as follows:
2. Section 910.857 is added to read as follows:

§ 910.857 Lemon Regulation 557.
The quantity of lemons grown in California and Arizona which may be handled during the period April 19 through April 25, 1987 is established at 315,000 cartons.

Date: April 15, 1987

Ronald L. Cioffi,
Acting Deputy Director, Fruit and Vegetable Division, Agricultural Marketing Service.

[FR Doc. 87-8819 Filed 4-16-87; 8:45 am]
BILLING CODE 3410-02-M

7 CFR Part 917
Fresh Pears, Plums, and Peaches Grown in California; Pear Commodity Committee Representation

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Final rule.

SUMMARY: This final rule will reallocate the membership on the Pear Commodity Committee and re-group certain districts, for purposes of representation, within the production area. The changes reflect the relative quantity of pears shipped from the respective representation areas. This action was unanimously recommended by the Pear Commodity Committee established under this order.

EFFECTIVE DATE: This final rule becomes effective April 17, 1987

FOR FURTHER INFORMATION CONTACT: James M. Scanlon, Acting Chief, Marketing Order Administration Branch, F&V AMS, USDA, Washington, DC 20250-1400 (202) 475-5914.

SUPPLEMENTARY INFORMATION: This final rule has been reviewed under Executive Order 12291 and Departmental Regulation 1512-1 and has been determined to be a “non-major” rule under criteria contained therein.

Pursuant to requirements set forth in the Regulatory Flexibility Act (RFA), the Administrator of the Agricultural Marketing Service (AMS) has determined that this action will not have a significant economic impact on a substantial number of small entities.

The purpose of the RFA is to fit regulatory actions to the scale of business subject to such actions in order that small businesses will not be unduly or disproportionately burdened.

Marketing orders issued pursuant to the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601-674), and rules issued thereunder are unique in that they are brought about through group action of essentially small entities acting on their own behalf. Thus, both statutes have small entity orientation and compatibility.

It is estimated that 43 pear handlers under the marketing order for fresh pears, plums, and peaches grown in California will be subject to regulation during the course of the current season. In addition, there are about 430 pear producers in California. Small agricultural producers have been defined by the Small Business Administration (13 CFR 121.2) as those having average annual gross revenues for the last three years of less than $100,000 and agricultural service firms are defined as those whose gross annual receipts are less than $3,500,000. The majority of producers and handlers may be classified as small entities.

This action is administrative in nature in that it will redefine the representation areas and reallocate the membership on the Pear Commodity Committee accordingly. It will more accurately reflect representation on the committee according to the provisions of the order and regulations. It does not impose any additional costs on growers or handlers of pears.

Notice of this action was published in the March 2, 1987 Federal Register (52 FR 6185) affording interested persons until March 12, 1987 to file written comments. None were received.

This final rule is issued under Marketing Order No. 917 regulating the handling of pears, plums, and peaches grown in California. The action is based upon the recommendation and information submitted by the Pear Commodity Committee and upon other available information.

Under the order and regulations, the production area is divided into five areas for purposes of representation on the 14-member Pear Commodity Committee. One public member is included in the total number of members. These areas are specified in paragraphs (a) through (e) of § 917.121.
The number of members from each area and the grouping of the districts within each area are based, insofar as practicable, upon the proportionate quantity of pears shipped from the respective areas during the preceding three fiscal years. Section 917.35(g) of the order authorizes the Pear Commodity Committee, with the approval of the Secretary, to redefine the representation in any area. Any such changes are to be based, so far as practicable, upon the proportionate quantity of fruit shipped from the respective representation area during the three preceding fiscal periods. In addition, so far as practicable, a member position should be assigned to any representation area from which 5 percent of shipments originated during the appropriate period.

The final rule will reduce the number of representation areas to four by combining area "a" (the North Sacramento Valley District and Central Sacramento Valley District) with area "e" (the Placer-Colfax District, the El Dorado District and the representation area covering the balance of the State). Membership from the combined area will be reduced from two members to one member. The final rule will also increase from two to three the number of members representing area "d" (the Mendocino District and the North Bay District).

The reason for this action is more accurate alignment of the districts within the areas of representation in accordance with the proportionate quantity of pears shipped. During the immediately preceding three years (1984–86), pear shipments totaled 12,069 cars. During that period, area "d" with two members, accounted for 3,026 cars or 25 percent of the total. Areas "a" and "e" combined, with their two members, accounted for 740 cars or 6.1 percent of the total shipments. Area "b" with three members, accounted for 2921 cars or 24.2 percent of the total. Area "c" with 6 members, accounted for 5402 cars or 44.7 percent of the total. For this reason, it is appropriate to realign the districts as hereinafter set forth.

Section 917.121 was amended and published in the Federal Register on October 8, 1985 (50 FR 40981). That amendment deleted paragraph (f). However, paragraph (f) was inadvertently published in the Code of Federal Regulations, revised as of January 1, 1986. Therefore, this action will also delete paragraph (f) from § 917.121.

It is hereby found and determined that the amendment, as hereafter set forth, will tend to effectuate the declared policy of the Act. It is further found that good cause exists for not postponing the effective date of this action until 30 days after publication in the Federal Register (5 U.S.C. 553) because the Pear Commodity Committee's regular term of office ended February 28, 1987 and it is necessary that the new committee be selected promptly in accordance with this action.

List of Subjects in 7 CFR Part 917
Marketing agreements and orders, Pears, California.

For the reasons set forth in the preamble, 7 CFR Part 917 is amended as follows:

PART 917—FRESH PEARS, PLUMS, AND PEACHES GROWN IN CALIFORNIA

1. The authority citation for 7 CFR Part 917 continues to read as follows:


2. Section 917.121 is revised to read as follows:

§ 917.121 Changes in nomination of Pear Commodity Committee members.

Nominations for membership on the Pear Commodity Committee shall be made by the growers of pears in the respective representation areas as follows:

(a) North Sacramento Valley District, Central Sacramento Valley District, Placer-Colfax District, El Dorado District, and all of the production area not included in paragraphs (b) through (d) of this section, one nominee.

(b) Sacramento River District, Stockton District, Stanislaus District, Contra Costa District, Santa Clara District and Solano District, three nominees.

(c) Lake District, six nominees.

(d) Mendocino District and North Bay District, three nominees.


Ronald L. Cioffi,
Acting Deputy Director, Fruit and Vegetable Division, Agricultural Marketing Service.

[FR Doc. 87–0080 Filed 4–16–87; 8:45 am]

BILLING CODE 3410–02–M

7 CFR Part 948

Irish Potatoes Grown in Colorado, Areas II and III; Amendment of the Rules and Regulations

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Final rule.

SUMMARY: This final rule will: (1) Restructure the handler representation on the Area II Colorado Potato Administrative Committee; (2) change the fiscal year for Area II that begins July 1 and ends June 30 to begin September 1 and to end August 31; (3) change the term of office for Area III Colorado Potato Administrative Committee members that begins June 1 and ends May 31 to begin May 1 and to end April 30; and (4) reappoint the producer members of the Area III Colorado Potato Administrative Committee. The changes are intended to provide more equitable producer and handler representation on the committees in recognition of changes that have occurred in the relative importance of certain producers and handlers, and to improve program operations. The action was recommended unanimously by the respective committees.

EFFECTIVE DATE: April 17, 1987

FOR FURTHER INFORMATION CONTACT: James M. Scanlon, Acting Chief, Marketing Order Administration Branch, F&A AMS, USDA, Washington, D.C. 20250-1400; telephone: (202) 447–5697

SUPPLEMENTARY INFORMATION: This final rule has been reviewed under Executive Order 12291 and Departmental Regulation 1512–1 and has been determined to be a "non-major" rule under the criteria contained therein.

Pursuant to requirements set forth in the Regulatory Flexibility Act (RFA), the Administrator of the Agricultural Marketing Service (AMS) has determined that this action will not have a significant economic impact on a substantial number of small entities.

The purpose of the RFA is to fit regulatory actions to the scale of businesses subject to such actions in order that small businesses will not be unduly or disproportionately burdened. Marketing orders issued pursuant to the Agricultural Marketing Agreement Act of 1937 as amended (the Act, 7 U.S.C. 601–674), and rules promulgated thereunder, are unique in that they are brought about through group action of essentially small entities acting on their own behalf. Thus, both statutes have small entity orientation and compatibility.

There are approximately 123 handlers of Area II Colorado potatoes and 19 handlers of Area III Colorado potatoes subject to regulation under the marketing order for Irish potatoes grown in Colorado. In addition, there are approximately 290 Area II producers and 112 Area III producers in the respective production area. Small agricultural producers have been defined by the Small Business
Administration (13 CFR 121.2) as those having annual gross revenues for the last three years of less than $100,000. Handlers are considered small entities if gross annual revenues are less than $3,500,000. The majority of Area II and Area III Colorado potato producers and handlers can be classified as small entities.

The Administrator of AMS has considered the impact of this regulatory action on small entities. The regulatory action in this instance is a final rule that will: (1) Restructure the handler representation on the Area II Colorado Potato Administrative Committee; (2) change the fiscal year for Area II that begins July 1 and ends June 30 to begin September 1 and to end August 31; (3) change the term of office for Area III Colorado Potato Administrative Committee members that begins June 1 and ends May 31 to begin May 1 and to end May 30; and (4) reappoint the producer members of the Area III Colorado Potato Administrative Committee. These changes are primarily of an administrative nature and, as such, do not impose any additional costs on handlers or producers.

This action is being issued under the marketing agreements and Order No. 948 (7 CFR 948), both as amended, regulating the handling of Irish potatoes grown in Colorado. The agreement and order are effective under the Act.

Pursuant to § 948.53, the term of office begins. The Administrator of AMS has considered the impact of this regulatory action on small entities. The regulatory action in this instance is a final rule that will: (1) Restructure the handler representation on the Area II Colorado Potato Administrative Committee; (2) change the fiscal year for Area II that begins July 1 and ends June 30 to begin September 1 and to end August 31; (3) change the term of office for Area III Colorado Potato Administrative Committee members that begins June 1 and ends May 31 to begin May 1 and to end May 30; and (4) reappoint the producer members of the Area III Colorado Potato Administrative Committee. These changes are primarily of an administrative nature and, as such, do not impose any additional costs on handlers or producers.

This action is being issued under the marketing agreements and Order No. 948 (7 CFR 948), both as amended, regulating the handling of Irish potatoes grown in Colorado. The agreement and order are effective under the Act.

Notice of the proposed rulemaking was published in the Federal Register on March 2, 1987 (52 FR 6168). The comment period ended on March 12, 1987; no comments were received. The final rule is the same as the proposed rule.

The handler representation change on the Area II committee is needed to provide bulk handlers adequate representation on the committee. Currently, the handler representation specified in § 948.50 is allocated between handlers representing all producers' cooperative marketing associations (currently allocated two members and alternate members), and handlers representing handlers other than producers' cooperative marketing associations (currently allocated three members and alternate members). Specific representation for bulk handlers is not provided.

The Area II committee recommended providing specific representation for this handler group because it has increased in importance on the basis of shipments in recent years relative to the other handlers in that area and because the interests of bulk handlers are different enough from other handlers to warrant specific representation. According to the committee, bulk handlers sell to different markets, market different packs, and share different problems than the other handlers in the industry. During the 1985-86 season, bulk handlers handled about 25 percent of shipments, cooperative marketing associations handled about 15 percent of the shipments, and about 60 percent of the shipments were made by handlers other than producers' cooperative associations and bulk handlers.

In recognition of the relative importance of the bulk handler group in Area II and other special interests, the Area II committee recommended pursuant to § 948.53 that one handler member represent bulk handlers, one handler member represent all producers' cooperative marketing associations, and three handlers represent handlers other than cooperative marketing associations, and bulk handlers. The effect of the recommendation and this action is to take one handler position away from the cooperative marketing associations and give it to bulk handlers. This is equitable on the basis of the relative importance of each group in terms of shipments.

Pursuant to § 948.103, since 1970, the fiscal period has been July 1 through June 30 (7 CFR 948.103, 35 FR 13581; August 20, 1970). Since that time, however, the season has extended the marketing season well into the summer months (through August 31). The committee believes that a September 1-August 31 fiscal period which conforms to the actual shipping season would improve program administration and financial operations. The fiscal period change was recommended on this basis. In recognition of this action, the 1986-87 fiscal period will be extended two months to August 31, 1987.

The term of office specified in § 948.104 for the Area III Colorado Potato Administrative Committee members currently begins June 1 and ends May 31. The members serve two-year terms, and a portion of the membership is selected each year. The annual committee meetings have historically been held in June, and the June 1-May 31 two-year term of office enabled new committee members to participate fully at such meetings. However, the committee has recently determined that holding the annual meeting in May would help avoid conflicts with producer planting schedules and give the industry more time to plan its operations in light of the committee's recommendations for the new season.

In connection with the committee's desire to hold earlier organizational meetings but still allow the new members selected each year to participate at those meetings, the committee recommended that the term of office of its members begin May 1 rather than June 1. Under the final rule, the term of office of current committee members now scheduled to end on the last day of May in 1987 or 1988 will automatically expire on the last day of April of those years. The date for submitting nominees will be adjusted pursuant to § 948.56 by one month to give the Secretary sufficient time to complete the selection process before the term of office begins.

Currently, five producers and four handlers comprise the Area III administrative committee. Pursuant to § 948.50(c), the five producers are selected so three producers are from Weld County, one producer is from Morgan County, and one producer is from the remaining counties of Area III. In recent years, the number of growers and the amount of production has decreased significantly outside of Morgan and Weld Counties. There are about 112 producers in Area III, and only four of those are outside of Morgan and Weld Counties. Moreover, close to 70 percent of the producers from that area are located in Weld County and they normally produce about 60 percent of the tonnage. Hence, to foster more equitable producer representation on the Area III Potato Administrative Committee, the committee recommended continuing the three member representation for Weld County and allocating the remaining two members to producers from the remaining counties of Area III, rather than splitting them between Morgan County and the remaining counties comprising Area III.

The final rule will formally establish the current apportionment recognized by the Area III potato industry for more than 15 years. Since 1970, the four handler members on the Area III administrative committee have been apportioned and allocated equally between Weld County and all of the remaining counties in Area III. However, this apportionment was never formally acted upon by the Department pursuant to § 948.53. According to the committee, this apportionment is still equitable based on the quantity of potatoes shipped by handlers located in Weld County and handlers located in the
remaining counties in Area III. Approximately 60 percent of the potatoes shipped from Area III over the last few seasons under the marketing agreement and order program have been made by handlers from Weld County.

After consideration of all relevant information presented, including the proposal set forth in the notice, it is hereby found that this action will tend to effectuate the declared policy of the Act.

It is further found that good cause exists for not postponing the effective date until 30 days after publication in the Federal Register (5 U.S.C. 553), for the following reasons: (1) Among other things, this action restructures the handler membership on the Area II Colorado Potato Administrative Committee; (2) the committee selection and qualification process should be completed by June 1, 1987, the beginning of the new term of office; (3) moreover, a revision of the Area II Colorado Administrative Committee's 1986-87 fiscal period budget is needed to cover the additional expenses anticipated because of the extension of the 1986-87 fiscal period by two months from June 30 to August 31; (4) the Area II committee plans to meet in late April to discuss and recommend to the Department any needed budget revisions; (5) hence, this action must be effective promptly for the selection and budget activities to be completed as scheduled; and (6) no useful purpose would be served by postponing the effective date of this action.

List of Subjects in 7 CFR Part 948
Marketing agreements and orders, Potatoes, Colorado.

PART 948—[AMENDED]
For the reasons set forth in the preamble, 7 CFR Part 948 is amended as follows:

1. The authority citation for 7 CFR Part 948 continues to read as follows:

2. A new § 948.150 will be added to read as follows:

§ 948.150 Reestablishment of committee membership.

Pursuant to § 948.53, membership on each area committee shall be reestablished as follows:
(a) Area No. 2 (San Luis Valley): Seven producers and five handlers selected as follows:
Three (3) producers from Rio Grande County:
One (1) producer from Saguache County;
One (1) producer from Conejos County;
One (1) producer from Alamosa County;
One (1) handler representing all producers' cooperative marketing associations in Area No. 2;

(b) Area No. 3: Five producers and four handlers selected as follows:
Three (3) producers from Weld County;
Two (2) producers from all other counties in Area No. 3;
Two (2) handlers from Weld County;
Two (2) handlers from all other counties in Area No. 3.

3. The provisions of § 948.103 will be revised to read as follows:

§ 948.103 Fiscal period.

Pursuant to § 948.10, the fiscal periods for each area shall be as follows:
(a) Area No. 1 and Area No. 3 shall begin July 1 and end June 30 of the following year, both dates inclusive;
(b) Area No. 2 shall begin September 1 and end August 31 of the following year, both dates inclusive. The 1986-87 fiscal period which began July 1, 1986, will be extended two months to August 31, 1987.

4. The provisions of § 948.104 will be revised to read as follows:

§ 948.104 Term of office.

(a) Pursuant to § 948.55, the two-year term of office for area committee members and alternates shall be as follows:
(1) Area No. 1 and Area No. 2 shall begin June 1 and end May 31 of the second year following;
(2) Area No. 3 shall begin May 1 and end April 30 of the second year following.
(b) The one-year term of office of Colorado Potato Committee members shall begin as of June 1 of each year.

Ronald L. Cioffi,
Acting Deputy Director, Fruit and Vegetable Division, Agricultural Marketing Service.

SUMMARY: This final rule amends the substantive dockage system for Muscat, Sultana, and Zante Currant raisins. Currently, handlers may acquire as standard raisins any lot of these raisin varieties containing more than 12 percent, by weight, of substandard raisins subject to a weight dockage system. This action will limit the percentage of substandard raisins that can be received by handlers to 17 percent, but will not alter the dockage factor. Raisin lots containing in excess of 17 percent substandard raisins will be off-grade and will have to be reconditioned before they can be acquired as standard raisins by handlers. This change will be effective beginning in the 1987-88 crop year.

EFFECTIVE DATE: August 1, 1987

FOR FURTHER INFORMATION CONTACT: Ronald L. Cioffi, Chief, Marketing Order Administration Branch, Fruit and Vegetable Division, AMS, USDA, Washington, DC 20250 (202) 447-5697

SUPPLEMENTARY INFORMATION: This final rule has been reviewed under Executive Order 12291 and Departmental Regulation No. 1512-1 and has been determined to be a "non-major" rule under criteria contained therein.

Pursuant to requirements set forth in the Regulatory Flexibility Act (RFA), the Administrator of the Agricultural Marketing Service has determined that this action will not have a significant economic impact on a substantial number of small entities.

The purpose of the RFA is to fit regulatory actions to the scale of business subject to such actions in order that small businesses will not be unduly or disproportionately burdened. Marketing orders issued pursuant to the Agricultural Marketing Agreement Act, and rules issued thereunder, are unique in that they are brought about through group action of essenconally small entities acting on their own behalf. Thus, both statutes have small entity orientation and compatibility.

It is estimated that approximately 23 handlers of raisins under the marketing order will be subject to regulation during the course of the current season. There are about 300 producers of Muscat, Sultana, and Zante Currant raisins in the regulated area. Small agricultural producers have been defined by the Small Business Administration (13 CFR 121.2 (1985)) as those having average annual gross revenues for the last three years of less than $100,000 and agricultural service firms, which would include handlers, are defined as those whose gross annual receipts are less than $3,500,000. The majority of California raisin producers and handlers...
may be characterized as small producers and handlers. The estimated crop value of production for the past three years for Muscat, Sultana, and Zante Currant raisins was $8,111,402.

The regulation will apply to all handlers of Muscat, Sultana, and Zante Currant raisins. Handlers have experienced difficulties processing lots of raisins which have excessive amounts of substandard raisins. This regulation will enable handlers to market raisins with higher quality levels at lower processing costs.

Producers are paid according to the creditable fruit weight of raisins delivered. If producers deliver lots of raisins which contain excessive amounts of substandard raisins, the delivery weight of such lots will be docked, thereby decreasing their payment for that lot. If the lot exceeds the 17 percent limit and is off-grade as provided in this final rule, the producer will incur the reconditioning costs necessary to bring the lot within acceptable requirements. This change will not be effective until August 1, 1987, the beginning of the 1987–88 crop year, in order to give producers adequate time to adjust their cultural practices, to help minimize the production of excessive amounts of substandard raisins, and to improve the quality of these varietal types of raisins delivered for processing.

Additional production costs based on the implementation of improved cultural practices may be incurred by producers. However, it is expected that these costs will be offset or significantly reduced by the benefits of reduced processing and reconditioning costs. This action will contribute to a more efficient processing operation and a better quality product.

The reporting and recordkeeping requirements under the raisin marketing order are not changed by this rule. Reporting and recordkeeping functions are already used in connection with existing quality requirements, and this action does not increase such requirements. Thus, no additional costs concerning recordkeeping are expected.

Based on available information, the Administrator of the Agricultural Marketing Service has determined that the issuance of this final rule will not have a significant economic impact on a substantial number of small entities.

A proposed rule on this amendment was published in the Federal Register on January 16, 1987 (52 FR 1919) inviting written comments through February 17, 1987. No comments were received.

The substandard dockage system permits handlers to acquire as standard raisins any lot of Muscat, Sultana, and Zante Currant raisins even though the lot has been determined to be off-grade because they contain an excess amount of substandard raisins. Currently, no upward limit is prescribed on the quantity of substandard raisins in lots which can be acquired under the system. Lots of raisins containing more than 12 percent, by weight, of substandard raisins are subject to a dockage factor. This factor reduces the weight of the lot by an amount approximating the weight of the substandard raisins needed to be removed in order for the balance of the lot to meet grade standards. This dockage factor will remain unchanged by this amendment.

The Raisin Administrative Committee has recommended that the percentage of substandard raisins allowed to be acquired by handlers be limited to 17 percent. Producers delivering these types of raisins containing between 12.1 percent and 17 percent substandard raisins would be docked a 0.1 percent weight deduction for each 0.1 percent of substandard raisins in excess of 12.1 percent—up to the 17 percent maximum. Raisin lots that exceed 17 percent substandard will be off-grade and require reconditioning before they can be acquired as standard raisins by handlers. The Committee unanimously recommended this action.

This final rule is issued under Marketing Order No. 989, as amended (7 CFR Part 989), regulating the handling of raisins produced from grapes grown in California. The order is effective under the Agricultural Marketing Agreement Act of 1937 as amended (7 U.S.C. 601–674).

After consideration of all relevant matter presented (the information and recommendation submitted by the Committee, and other available information), it is further found that this action, as heretofore set forth, will tend to effectuate the declared policy of the Act.

List of Subjects in 7 CFR Part 989
Marketing agreements and orders, Grapes, Raisins, California.

For the reasons set forth in the preamble, 7 CFR Part 989 is amended as follows:

PART 989—RAISINS PRODUCED FROM GRAPES GROWN IN CALIFORNIA

1. The authority citation for 7 CFR Part 989 continues to read as follows:


2. Paragraphs (a) and (c) and the note following (c) of § 989.212 will be revised to read as follows:

Subpart—Supplementary Regulations
§ 989.212 Substandard dockage.
(a) Subject to prior agreement between handler and tenderer, Natural (sun-dried) Seedless, Golden Seedless, Olate and Related Seedless and Monukka raisins containing from 5.1 through 10.0 percent, by weight, of substandard raisins may be acquired by a handler under a weight dockage system. A handler also may, subject to prior agreement, acquire as standard raisins any lot of Muscat (including other raisins with seeds), Sultana, and Zante Currant raisins containing from 12.1 percent through 17 percent, by weight, of substandard raisins under a dockage system. The creditable weight of each lot of raisins acquired under the substandard dockage system shall be obtained by multiplying the applicable net weight or creditable weight (weight determined by applying the applicable weight adjustment factor for moisture), of the lot of raisins by the applicable dockage factor from the appropriate dockage table prescribed in paragraph (b) or (c) of this section.
(b) **

(c) Substandard dockage table applicable to Muscat (including other raisins with seeds), Sultana and Zante Currant raisins.

| Percentage |
|-----------|-------------|
| substandard | Dockage factor |
| 12.0 or less | (1) |
| 12.1 | .999 |
| 12.2 | .996 |
| 12.3 | .996 |
| 12.4 | .996 |
| 12.5 | .995 |

1 No dockage.

Note.—Percentages in excess of the last percentage shown in the table shall be expressed in the same increments as the foregoing, and the dockage factor for each such increment shall be .001 less than the dockage factor for the preceding increment. Deliveries in excess of 17 percent would be off-grade; therefore, the dockage factor does not apply.

Dated: April 10, 1987
Ronald L. Cieft,
Acting Deputy Director, Fruit and Vegetable Division, Agricultural Marketing Service.
[FR Doc. 87–8598 Filed 4–16–87; 8:45 am]
BILLING CODE 4410–02–M
Food Safety and Inspection Service

9 CFR Part 318

[Docket No. 80-054C-1]

Additional Methods for Destruction of Trichinae in Pork Products; Correction

AGENCY: Food Safety and Inspection Service, USDA.

ACTION: Final rule with request for comments; correction.

SUMMARY: This document corrects a final rule on trichina destruction by revising three figures contained in Table 6.

For Further Information Contact:


SUPPLEMENTARY INFORMATION: On February 7, 1985, the Food Safety and Inspection Service (FSIS) published a final rule with request for comments in the Federal Register (50 FR 5226) which permits additional treatment methods for trichina destruction in pork products.

Table 6, Smoking and Drying Schedule (9 CFR 318.10(c)(3)) gives the minimum number of days required for drying smoked hams and pork shoulders after smoking. Three of those numbers, however, were listed incorrectly.

Accordingly, FSIS amends Table 6 of 9 CFR 318.10(c)(3) as follows:

1. Under 60°F in column 1:
   1. Line 3, under 60°F in column 7 change “50” to “56”
   2. Line 7 under 70°F in column 5, change “39” to “29” and
   3. Line 10, under 45°F in column 10, change “69” to “60”

Done at Washington, D.C., on April 14, 1987.

Donald L. Houston, Administrator, Food Safety and Inspection Service.

[FR Doc. 87-8854 Filed 4-18-87; 8:45 am]
BILLING CODE 3410-DM-M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 85-ASW-25; Amdt. 39-5541]

Airworthiness Directives; Bell Helicopter Textron, Inc., Model 214B and 214ST Series Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This action publishes in the Federal Register and makes effective as to all persons an amendment adopting a new airworthiness directive (AD) which was previously made effective as to all known U.S. owners and operators of certain Bell Helicopter Textron, Inc. (BHTI), Model 214B/B1 and 214ST series helicopters by individual priority letters. The AD requires repetitive visual and magnetic particle inspections of the main rotor drag brace assembly for corrosion and cracks.

The AD is needed to prevent failure of the main rotor drag brace, which could result in loss of control of the helicopter.

Effective Dates: April 20, 1987, as to all persons except those persons to whom it was made immediately effective by priority letter No. 85-18-06 issued September 11, 1985, which contained this amendment.

Compliance: As indicated in the body of the AD.

Addresses: The applicable service information may be obtained from Bell Helicopter Textron, Inc., P.O. Box 482, Fort Worth, Texas 76101.

Copies of applicable service bulletins are contained in the Rules Docket, Office of the Regional Counsel, FAA, Southwest Region, 4400 Blue Mound Road, Fort Worth, Texas 76106.

For further Information Contact:

Mr. Henry A. Armstrong, Helicopter Certification Branch, Aircraft Certification Division, 817-A70, FAA, Southwest Region, P.O. Box 1689, Fort Worth, Texas 76101.

SUPPLEMENTARY INFORMATION: On September 11, 1985, priority letter AD No. 85-18-06 was issued and made effective immediately as to all known U.S. owners and operators of certain BHTI Model 214B/B1 and 214ST series helicopters. This AD is necessary to prevent failure of the main rotor drag brace. The AD requires repetitive visual and magnetic particle inspections of the main rotor drag brace assembly for corrosion and cracks. Undetected cracks could propagate, resulting in failure of the drag brace and loss of control of the helicopter.

Since it was found that immediate corrective action was required, notice and public procedure thereon were impracticable and contrary to public interest, and good cause existed to make the AD effective immediately by individual priority letters issued September 11, 1985, to all known U.S. owners and operators of certain BHTI Model 214B1 and 214ST series helicopters. These conditions still exist and this AD is hereby published in the Federal Register as an amendment to § 39.13 of the Federal Aviation Regulations to make it effective as to all persons.

The FAA has determined that this regulation is an emergency regulation that is not considered to be major under Executive Order 12291. It is impracticable for the agency to follow the procedures of Executive Order 12291 with respect to this rule since the rule must be issued immediately to correct an unsafe condition in aircraft. It has been further determined that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979). If this action is subsequently determined to involve a significant/major regulation, a final regulatory evaluation or analysis, as appropriate, will be prepared and placed in the regulatory docket (otherwise, an evaluation or analysis is not required). A copy of it, when filed, may be obtained by contacting the person identified under the caption “For Further Information Contact.”

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety, Incorporation by reference.

Adoption of the Amendment

PART 39—[AMENDED]

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends § 39.13 of Part 39 of the FAR as follows:

1. The authority citation for Part 39 continues to read as follows:


§ 39.13 [Amended]

2. By adding the following new AD:

Bell Helicopter Textron, Inc.: Applies to all Bell Helicopter Model 214B/B1 and 214ST series helicopters certificated in all categories.

Compliance is required within the next 10 hours’ time in service, unless previously accomplished, and thereafter at 250 hour intervals.

To prevent failure of the main rotor drag brace accomplish the following:

(a) Inspect main rotor drag brace assembly, Part Number (P/N) 214-010-113-001 or 003, in accordance with Bell Helicopter Textron, Inc. (BHTI), Alert Service Bulletin 214-85-28, dated September 3, 1985, or 214ST-85-29, dated September 3, 1985, as applicable.

(b) If cracks are found, or if corrosion is found which cannot be removed within the
limits of the rework criteria in the Alert Service Bulletins, replace with serviceable parts.

(c) An alternative means of compliance or adjustment of the compliance time, which provides an equivalent level of safety, must be approved by the Manager, Helicopter Certification Branch, Aircraft Certification Division, FAA, Southwest Region.

This procedure shall be done in accordance with BHTI Alert Service Bulletin 214-66-30, dated September 3, 1985, or BHTI Alert Service Bulletin 214ST-85-29, dated September 3, 1985, as applicable. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Copies may be obtained from Bell Helicopter Textron, Inc., P.O. Box 482, Fort Worth, Texas 76101.

Copies may be inspected at the Office of Regional Counsel, FAA, 4400 Blue Mound Road, Fort Worth, Texas or at the Office of the Federal Register, 1100 L Street, NW., Room 8401, Washington, DC.

This amendment becomes effective April 20, 1987 as to all persons except those persons to whom it was made immediately effective by priority letter AD No. 85-18-08, issued September 11, 1985, which contained this amendment.

Issued in Fort Worth, Texas, on January 23, 1987
Don P. Watson,
Acting Director, Southwest Region.
[FR Doc. 87-8882 Filed 4-16-87; 8:45 am]
BILLING CODE 4910-12-M

14 CFR Part 39
[Docket No. 86-ASW-11, Amdt. 39-5542]

Airworthiness Directives; Messerschmitt-Bolkow-Blohm GmbH (MBB), Model BK-117A-3 Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This amendment amends an existing airworthiness directive (AD) which requires immediate replacement and frequent inspections of several tail rotor blades that may be installed on MBB BK-117A-3 helicopters. This amendment is needed to exclude additional tail rotor blades from further inspection or replacement.

DATES: Effective date: May 18, 1987

The incorporation by reference of certain publications in the regulations is approved by the Director of the Federal Register as of Compliance: As prescribed in the body of the AD.

ADDRESSES: A copy of the service bulletin is contained in the Rules Docket located at the Office of the Regional Counsel, Southwest Region, Federal Aviation Administration, Room 158, Building 38, 4400 Blue Mound Road, Fort Worth, Texas 76106. The applicable service information may be obtained from MBB Helicopter Corp., P.O. Box 2340, West Chester, Pennsylvania 19380.

FOR FURTHER INFORMATION CONTACT: J.H. Major, Rotorcraft Standards Staff, ASW-110, Aircraft Certification Division, Southwest Region, Federal Aviation Administration, P.O. Box 1889, Fort Worth, Texas 76101, telephone number (817) 624-5117.

SUPPLEMENTARY INFORMATION: A proposal to amend Amendment 39-5294 (51 FR 17614), AD 86-08-03 for MBB BK-117A-3 helicopters was published in the Federal Register on November 4, 1986 (51 FR 40032). AD 86-08-03, currently requires for certain MBB BK-117A-3 helicopters immediate replacement of certain tail rotor blades and frequent (preflight) inspections of the other blades for bond separation until rebonding of the affected blades, Serial Numbers S/N’s 63 through 115, is accomplished. After issuing Amendment 39-5294, MBB issued Service Bulletin No. SB-MBB-BK-117-30-1, Revision 1, dated June 12, 1986, to change the serial numbers of affected tail rotor blades to S/N’s 63 through 82. The proposal was issued to change the applicability accordingly and to add a new paragraph (f) to clarify in the AD that rebonded blades are no longer subject to the AD inspections.

Interested persons have been afforded an opportunity to participate in the making of the amendment. One comment was received from MBB Helicopter Corporation about the proposed paragraph (f). It noted that affected tail rotor blades which have satisfactorily passed an inspection or have been rebonded as prescribed in Service Bulletin SB-MBB-BK-117-30-1, Revision 1, may be returned to service. The FAA agrees, and the change to proposed paragraph (f) is included with minor editorial changes. The AD presently includes an incorporation by reference statement which is revised to include the previous maintenance manual cited in paragraphs (b) and (c) and to include SB-MBB-BK-117-30-1, Revision 1, referenced in new paragraph (f).

The FAA has determined that this regulation only involves about six aircraft with an estimated cost of compliance of $100 per aircraft or a total of $600. Therefore, I certify that this action (1) is not a "major rule" under DOT Regulatory Policies and Procedures (44 FR 11034; February 26, 1979); (2) does not warrant preparation of a regulatory evaluation as the anticipated impact is so minimal; and (4) will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety, Incorporation by reference.

Adoption of the Amendment

PART 39—[AMENDED]

Accordingly, pursuant to the authority delegated to me, the Federal Aviation Administration amends § 39.13 of Part 39 of the FAR (14 CFR 39.13) as follows:

1. The authority citation for Part 39 continues to read as follows:


§ 39.13 [Amended]

2. By amending Amendment 39-5294 (51 FR 17614), AD 86-08-03, as follows:

(a) Revise the applicability statement by removing “115" and inserting “82.”

(b) Add a new paragraph (f) to read as follows:

(f) A tail rotor blade with leading edge that was inspected and/or rebonded per MBB Service Bulletin No. SB-MBB-BK117-30-1, Revision 1, dated June 12, 1986, and determined serviceable is no longer subject to this AD.

(c) Remove the incorporation by reference statement at the end of the AD and add a new statement to read as follows:

The procedures shall be done in accordance with Section 34-2, paragraphs 2a, b, and c of the MBB BK-117 maintenance manual, undated, and MBB SB-MBB-BK-117-30-1, Revision 1, dated June 12, 1986. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a)(1).

Copies may be obtained from MBB Helicopter Corporation, P.O. Box 2340, West Chester, Pennsylvania 19380. Copies may be inspected at the Office of the Regional Counsel, FAA, Southwest Region, 4400 Blue Mound Road, Fort Worth, Texas, or at the Office of the Federal Register, 1100 L Street, NW., Room 8401, Washington, DC.

This amendment amends Amendment 39-5294 (51 FR 17614), AD 86-09-03.
Acting Director
Southwest

TDocket Number
tFR Doc.

Don P. Watson,
1987.

Rolls-Royce
bulletin

ADDRESSES:
the body of the

DATES:
HPC disk due to material property

SUMMARY:
needed to prevent fracture of the stage

ACTION:
installed on certain R-R

AGENCY: Federal Aviation

Series Turbofan Engines

Executive Park, Burlington,
Federal Aviation Administration, New

FOR FURTHER INFORMATION CONTACT.
Friday, except Federal holidays.
8:00
Office of the Regional Counsel, Federal

Department, P.O. Box

in Appendix

5346, was issued requiring removal from

20, 1986, AD 86-15-01,
39-ANE-17;
ROLLS-ROYCE Series Turbofan Engines

FOR FURTHER INFORMATION CONTACT.

FR 29946). This proposal was prompted
at the next 04 module

rework but not later than May 31, 1988.

Interested persons have been afforded an opportunity to participate in the making of this amendment, and due consideration has been given to all relevant data and comments received. Several commenters called to state that AD 86-13-08 could not be identified. The FAA has subsequently found that the AD number assigned in the notice of proposed rulemaking was incorrect and the correct AD number is AD 86-15-01.

The correct number has been incorporated in this AD. Another commenter suggested that since, in Revision 1 of R-R ASB RB.211-72-A7774, 2 disk assemblies were deleted from Appendix 3, this alleviation from the requirements of the original issues of both the ASB and AD 86-15-01 should be included in this amendment. The FAA had incorporated the requirements of R-R ASB RB.211-72-A7774, Revision 1, dated March 21, 1986, in AD 86-15-01. Therefore, the correct total number of disk assemblies listed in Appendix 3 of the ASB required to be removed had been incorporated in the published AD 86-15-01. No other comments were received.

Conclusion
The FAA has determined that this regulation involves 133 R-R RB211 turbofan engines at an approximate total cost of $3.9 million dollars. It has also been determined that less than 11 small entities will be affected by this regulation. Therefore, I certify that this action (1) is not a “major rule” under Executive Order 12291; (2) is not a

“significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034; February 28, 1979); and (3) will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the final evaluation prepared for this action is contained in the regulatory docket. A copy of it may be obtained by contacting the person identified under the caption "FOR FURTHER INFORMATION CONTACT".

List of Subjects in 14 CFR Part 39
Engines, Air transportation, Aircraft, Aviation safety.

Adoption of the Amendment

PART 39—[AMENDED]

Accordingly, pursuant to the authority delegated to me, the Federal Aviation Administration (FAA) amends Part 39 of the Federal Aviation Regulations (FAR) as follows:

1. The authority citation for Part 39 continues to read as follows:


§ 39.13 [Amended]

2. By amending § 39.13, Amendment 39-5346 (51 FR 25192), Airworthiness Directive (AD) 86-15-01, as follows:

(a) By lettering the paragraph immediately prior to the “NOTE” as paragraph "(a)"

(b) By adding the following new paragraph:

(b) Remove from service stage 1 and 2 HPC disk assemblies identified by serial number in Appendix 4 of Rolls-Royce ASB RB.211-72-A7774, Revision 1, dated March 21, 1986, or FAA approved equivalent, at the next 04 module rework but not later than May 31, 1988.

This amendment amends Amendment 39-5346 (51 FR 25192), AD 86-15-01. Issued in Burlington, Massachusetts, on April 8, 1987.

Jack A. Saa,
Acting Director, New England Region.

[FR Doc. 87-8262 Filed 4-18-87; 8:45 am]

BILLING CODE 4910-13-M

14 CFR Part 97

[Docket No. 25225; Amdt. No. 1344]

Standard Instrument Approach Procedures; Miscellaneous Amendments

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

Issued in Fort Worth, Texas, on March 3, 1987.
Don P. Watson,
Acting Director, Southwest Region.

[FR Doc. 87-8264 Filed 4-19-87; 8:45 am]

BILLING CODE 4910-13-M

14 CFR Part 39

[Docket Number 85-ANE-17; Amt. 39-5608]

Airworthiness Directives; Rolls-Royce plc (R-R) (Formerly Rolls-Royce Limited) RB211-22B, −535C, and −524 Series Turbofan Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: This amendment amends an existing airworthiness directive (AD) to require removal from service of additional stage 1 and 2 high pressure compressor (HPC) disk assemblies installed on certain R-R RB211 series turbofan engines. The amendment is needed to prevent fracture of the stage 1 HPC disk due to material property deviations incurred during the manufacturing process which could result in uncontrolled engine failure.

DATES: Effective—May 29, 1987

Compliance Schedule—As prescribed in the body of the AD.

ADDRESSES: The applicable alert service bulletin (ASB) may be obtained from Rolls-Royce plc, Technical Publication Department, P.O. Box 31, Derby DE2 8BJ, England.

A copy of the ASB is contained in Rules Docket Number 85-ANE-17 in the Office of the Regional Counsel, Federal Aviation Administration, New England Region, 12 New England Executive Park, Burlington, Massachusetts 01803, and may be examined between the hours of 8:30 a.m. and 4:30 p.m., Monday through Friday, except Federal holidays.

FOR FURTHER INFORMATION CONTACT:


SUPPLEMENTARY INFORMATION: On June 20, 1986, AD 86-15-01, Amendment 39-5346, was issued requiring removal from service of stage 1 and 2 HPC disk assemblies, identified by serial number in Appendix 3 of R-R ASB RB.211-72-A7774, Revision 1, dated March 21, 1986. Issuance of AD 86-15-01 was prompted by an uncontrolled stage 1 disk failure precipitated by manufacturing process deviations which contributed to a reduction of the low cycle fatigue life of the disk.

A proposal to amend Part 39 of the Federal Aviation Regulations (FAR) by amending Amendment 39-5346 (51 FR 25192), AD 86-15-01, to require the removal of additional stage 1 and 2 HPC disk assemblies identified by serial number in Appendix 4 of R-R ASB RB.211-72-A7774, Revision 1, dated March 21, 1986, was published in the Federal Register on August 21, 1986 (51 FR 25948). This proposal was prompted when the FAA determined that additional stage 1 and 2 HPC disk assemblies could be subject to material property deviations induced during the manufacturing process.

Since this condition is likely to exist or develop on other engines of the same type design, this amendment amends Amendment 39-5346 (51 FR 25192), AD 86-15-01, to require removal of additional stage 1 and 2 HPC disk assemblies listed in Appendix 4 of R-R ASB RB.211-72-A7774, Revision 1, dated March 21, 1986, at the next 04 module rework but not later than May 31, 1988.

Interested persons have been afforded an opportunity to participate in the making of this amendment, and due consideration has been given to all relevant data and comments received. Several commenters called to state that AD 86-13-08 could not be identified. The FAA has subsequently found that the AD number assigned in the notice of proposed rulemaking was incorrect and the correct AD number is AD 86-15-01.

The correct number has been incorporated in this AD. Another commenter suggested that since, in Revision 1 of R-R ASB RB.211-72-A7774, 2 disk assemblies were deleted from Appendix 3, this alleviation from the requirements of the original issues of both the ASB and AD 86-15-01 should be included in this amendment. The FAA had incorporated the requirements of R-R ASB RB.211-72-A7774, Revision 1, dated March 21, 1986, in AD 86-15-01. Therefore, the correct total number of disk assemblies listed in Appendix 3 of the ASB required to be removed had been incorporated in the published AD 86-15-01. No other comments were received.

Conclusion
The FAA has determined that this regulation involves 133 R-R RB211 turbofan engines at an approximate total cost of $3.9 million dollars. It has also been determined that less than 11 small entities will be affected by this regulation. Therefore, I certify that this action (1) is not a “major rule” under Executive Order 12291; (2) is not a
SUMMARY: This amendment establishes, amends, suspends, or revokes Standard Instrument Approach Procedures (SIAPs) for operations at certain airports. These regulatory actions are needed because of the adoption of new or revised criteria, or because of changes occurring in the National Airspace System, such as the commissioning of new navigational facilities, addition of new obstacles, or changes in air traffic requirements.

These changes are designed to provide safe and efficient use of the navigable airspace and to promote safe flight operations under instrument flight rules at the affected airports.

DATES: Effective: An effective date for each SIAP is specified in the amendatory provisions.

Incorporation by reference—approved by the Director of the Federal Register on December 31, 1980, and reapproved as of January 1, 1982.

ADDRESSES: Availability of matters incorporated by reference in the amendment is as follows:

For Examination—
1. FAA Rules Docket, FAA Headquarters Building, 800 Independence Avenue SW., Washington, DC 20591;
2. The FAA Regional Office of the region in which the affected airport is located; or
3. The Flight Inspection Field Office which originated the SIAP

For Purchases—
Individual SIAP copies may be obtained from:
1. FAA Public Inquiry Center (APA-430), FAA Headquarters Building, 800 Independence Avenue SW., Washington, DC 20591; or
2. The FAA Regional Office of the region in which the affected airport is located.

By Subscription—
Copies of all SIAPs mailed once every 2 weeks, are for sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

FOR FURTHER INFORMATION CONTACT:
Donald K. Punah, Flight Procedures Standards Branch (AFS-230), Air Transportation Division, Office of Flight Standards, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591; telephone (202) 426-6277

SUPPLEMENTARY INFORMATION: This amendment to Part 97 of the Federal Aviation Regulations (14 CFR Part 97) prescribes new, amended, suspended, or revoked Standard Instrument Approach Procedures (SIAPs). The complete regulatory description of each SIAP is contained in official FAA form documents which are incorporated by reference in this amendment under 5 U.S.C. 552(a), 1 CFR Part 51, and § 97.20 of the Federal Aviation Regulations (FARs). These SIAPs are specified in the amendment as follows:

1. 14 CFR Part 97

2. Effective dates

3. Amdt.

4. Dates

5. Joan S. Kern,

Director of Flight Standards.

Adoption of the Amendment

PART 97—[AMENDED]

Accordingly, pursuant to the authority delegated to me, Part 97 of the Federal Aviation Regulations (14 CFR Part 97) is amended by establishing, amending, suspending, or revoking Standard Instrument Approach Procedures, effective at 0801 G.M.T. on the dates specified, as follows:

1. The authority citation for Part 97 continues to read as follows:

Authority: 49 U.S.C. 1348, 1354(a), 1421, and 1510; 49 U.S.C. 100(g) [revised, Pub. L. 97-449, January 12, 1983; and 14 CFR 1.19(b)(2)].

§§ 97.23, 97.25, 97.27, 97.29, 97.31, 97.33, and 97.35 [Amended]

2. By amending: Section 97.23 VOR, VOR/DME, VOR or TACAN, and VOR/DME or TACAN; §97.25 LOC, LOC/DME, LDA, LDA/DME, SDF, SDF/DME; §97.27 NDB, NDB/DME; §97.29 ILS, ILS/DME, ISMISL, MLS, MLS/DME, MLS/RNAV; §97.31 RADAR SIAPs; §97.33 RNAV SIAPs; and §97.35 COPTER SIAPs, identified as follows:

. Effective June 4, 1987

Troy, AL—Troy Muni, NDB RWY 7, Amdt. 7
Delta Junction/Fort Greely, AK—Allen AAF, VOR RWY 18, Amdt. 7, Eff 4 JUN 87
Delta Junction/Fort Greely, AK—Allen AAF, VOR/DME or TACAN RWY 18, Amdt. 2, Eff 4 JUN 87
Delta Junction/Fort Greely, AK—Allen AAF, NDB-A, Amdt. 3, Eff 4 JUN 87
Fort Huachuca (Sierra Vista), AZ—Libby AAF/Sierra Vista Muni, LOC RWY 28, Org, Eff 4 JUN 87
Oakland, CA—Metropolitan Oakland Intl, NDB RWY 27R, Amdt. 4
Santa Rosa, CA—Sonoma County, VOR/ DME RWY 14, Org.
Galesburg, FL—Galesburg Muni, ILS RWY 5, Amndt. 2
Lakeland, FL—Lakeland Muni, ILS RWY 7, Amndt. 2
Baxley, GA—Baxley Muni, RNAV RWY 6, Amndt. 6
Galesburg, IL—Galesburg Muni, VOR RWY 2, Amndt. 1
Galesburg, IL—Galesburg Muni, ILS RWY 2, Amndt. 8
St. Jacob, IL—Shafer Metro East, VOR-A, Amndt. 2
Teterboro, NY—Teterboro, VOR, Amndt. 7
Winnemucca, NV—Winnemucca, VOR, Amndt. 6
Cuba, MO—Cuba Muni, VOR, Amndt. 2
St. Jacob, IL—Shafer Metro East, VOR-A, Amndt. 1
Galesburg, IL—Galesburg Muni, ILS RWY 2, Amndt. 8
St. Jacob, IL—Shafer Metro East, VOR-A, Amndt. 2
Port Sulphur, LA—Port Sulphur Seaplane Base, VOR/DME—A, Amndt. 5
Eveleth, MN—Eveleth-Virginia Muni, VOR RWY 30, Amndt. 3
Houghton Lake, MI—Roscommon County, VOR RWY 7, Amndt. 2
Houghton Lake, MI—Roscommon County, VOR RWY 27, Amndt. 1
West Point, MS—McCharen Field, RNAV RWY 13, Amndt. 2
Columbus-Lowndes County, MS—Columbus-Lowndes County, VOR/DME—A, Amndt. 2
Minneapolis, MN—Anoka County-Blaine Arpt [Janes Field], RNAV RWY 17, Amndt. 1
Red Wing, MN—Red Wing Muni, ILS RWY 5, Amndt. 1
Rochester, MN—Rochester Muni, ILS RWY 14, Amndt. 3
Staples, MN—Staples Muni, VOR/DME—A, Amndt. 2
Columbus, MS—Columbus-Lowndes County, VOR—A, Amndt. 12
West Point, MS—McCharen Field, VOR—A, Amndt. 3
Smyrna, TN—Smyrna, VOR/DME RWY 32, Amndt. 11
Baudette, MN—Baudette Intl, VOR/DME—A, Amndt. 12
Baudette, MN—Baudette Intl, VOR—A, Amndt. 2
Port Sulphur, LA—Port Sulphur Seaplane Base, VOR/DME—A, Amndt. 4
Port Sulphur, LA—Port Sulphur Seaplane Base, VOR/DME—B, Amndt. 3
Houghton Lake, MI—Roscommon County, VOR RWY 9, Amndt. 2
Effective May 7, 1987
Smyrna, OH—Griffing Smyrna, VOR RWY 27, Amndt. 5
[FR Doc. 87-6110 Filed 4-16-87; 8:45 am]
BILLING CODE 4180-15-M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Part 341

[Cabinet Of No. 76N-052B]

Cold, Cough, Allergy, Bronchodilator, and Antihistaminic Drug Products for Over-the-Counter Human Use; Final Monograph for OTC Bronchodilator Drug Products; Correction

AGENCY: Food and Drug Administration.

ACTION: Final rule; correction.

SUMMARY: The Food and Drug Administration (FDA) is amending the animal drug regulations to remove those portions of the regulations reflecting approval of three new animal drug applications (NADA's) held by Dow Chemical U.S.A. The NADA's provide for use of ronnel Type A articles for making Type C cattle feeds. Elsewhere in this issue of the Federal Register, FDA is withdrawing approval of the NADA's.

EFFECTIVE DATE: April 27, 1987

FOR FURTHER INFORMATION CONTACT: Mohammad I. Sharar, Center for Veterinary Medicine, 5600 Fishers Lane, Rockville, MD 20857 301-295-3184.

SUPPLEMENTARY INFORMATION: In a notice published elsewhere in this issue of the Federal Register, FDA is withdrawing approval of Dow Chemical U.S.A.'s NADA's 11-070, 41-377 and 49-956. The NADA's provide for use of dry and liquid ronnel Type A articles for making Type C cattle feeds. This document removes 21 CFR 558.525(a)(1) and 558-526 that reflect approval of the NADA's.

List of Subjects in 21 CFR Part 558

Animal drugs, Animal feeds.

Therefore, under the Federal Food, Drug, and Cosmetic Act and under authority delegated to the Commissioner of Food and Drugs and redelegated to the Center for Veterinary Medicine, Part 558 is amended as follows:

PART 558—NEW ANIMAL DRUGS FOR USE IN ANIMAL FEEDS

1. The authority citation for 21 CFR Part 558 continues to read as follows:

Authority: Sec. 512, 82 Stat. 343-351 (21 U.S.C. 360b); 21 CFR 6.10 and 5.65.

§ 558.525 [Amended]

2. Section 558.525 RONNEL is amended by removing paragraph [a][1] and reserving it for future use.

§ 558.526 [Removed]

3. Section 558.526 RONNEL LIQUID TYPE B FEED is removed.
Gerald B. Guest,
Director, Center for Veterinary Medicine. 
[FR Doc. 87-5634 Filed 4-18-87; 8:45 am]
BILLING CODE 4160-01-M

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52
[A-9-FRL-3162-5]

Approval and Promulgation of Implementation Plans, California; Amador County and Four Other Districts

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of final rulemaking.

SUMMARY: This notice gives final approval to rule revisions for Amador County and four other California Air Districts. The other districts are Northern Sonoma County, Ventura County and Yuba County Air Pollution Control Districts (APCD's) and the South Coast Air Quality Management District (AQMD). These revisions were submitted by the California Air Resources Board (ARB) for inclusion in the California State Implementation Plan (SIP) on October 19 and November 12, 1985. The revisions make minor changes in existing rules. EPA has reviewed these rules and determined that they are consistent with the requirements of the Clean Air Act and EPA policy. EPA is also correcting a minor error from a previous notice.

DATES: This action is effective June 16, 1987. This action will be effective 60 days from the date of this Federal Register, unless EPA receives notice within 30 days of publication that adverse or critical comments will be submitted.

ADDRESSES: Copies of the submittals and of EPA's Evaluation Report for each rule are available for review at EPA, Region 9. The address is listed under the next heading. All of the rules are also available at the EPA addresses in Washington and at the Air Resources Board address listed below. Rules of specific districts are available at the districts which adopted them. The addresses are given below.

EPA Library, Public Information Reference Unit, Environmental Protection Agency; 401 M Street, SW.,Washington, DC 20460

California Air Resources Board, General Projects Section, Technical Support Division, 1131 S Street, Sacramento, CA 95812

Amador County Air Pollution Control District, 108 Court Street, Jackson, CA 95642

Northern Sonoma County, Air Pollution Control District, 118 North Street, Healdsburg, CA 95448

South Coast Air Quality Management District, 9150 Flair Drive, El Monte, CA 91731

Ventura County Air Pollution Control District, 500 South Victoria Avenue, Ventura, CA 93009

Yuba County Air Pollution Control District, 938 14th Street, Marysville, CA 95901


This notice contains the following rules:

SUPPLEMENTARY INFORMATION:

Background

The specific rules submitted by California for incorporation into the SIP are listed below.

November 12, 1985

Northern Sonoma County Air Pollution Control District

Rule 130.04—Definitions—Stacking

South Coast Air Quality Management District

Rule 221—Plans

October 16, 1985

Amador County Air Pollution Control District

Rule 301—Prohibition from Burning

Rule 302—Exceptions to Rule 301

Rule 303—Agricultural Burning

Rule 304—Range Improvement Burning

Rule 305—Forest Management Burning

Rule 306—Land Development Clearing

Rule 307—Ditch and Road Maintenance

Rule 308—Hazard Reduction

Rule 309—Fire Suppression and Training

Rule 310—Residential Maintenance

Rule 311—Recreational Activity

Rule 312—Required Permit

Rule 313—No Burn Day

Rule 314—Burning Management

Rule 315—Minimum Drying Times

Rule 316—Burning Management

Rule 317—Mechanized Burners

Rule 318—Enforcement Responsibility

Rule 319—Penalty

Rule 320—Permit Required

Rule 322—Exemptions to Rule 321

Rule 323—Applications

Rule 324—Action on Applications

Rule 325—Conditional Approval

Rule 326—Denial of Application

Rule 327—Responsibility

Rule 328—Posting of Permit to Operate

Rule 509—Authority to Inspect

Rule 510—Separation of Emissions

Rule 511—Combination of Emissions

Rule 512—Circumvention

Rule 513—Source Recordkeeping

Rule 514—Public Records and Trade Secrets

Rule 517—Transfer

Rule 518—Revocation of a Permit to Operate

Rule 519—Appeals

Rule 520—Reinstatement

Rule 521—Annual Renewal

Northern Sonoma County APCD

Rule 100—Title

Rule 120—Administration

Rule 130—Definitions (d1, s5)

Rule 200—Permit Requirements

Rule 500—Enforcement

Rule 520—Civil Penalties

Rule 600—Authorization

Rule 810—Petition Procedure

Ventura County Air Pollution Control District

Rule 15—Permit Issuance

Rule 54—Sulfur Compounds

Rule 61—Oil Water Separators

Rule 64—Sulfur in Fuels

Rule 67—Vacuum Producing Devices

Rule 69—Asphalt Air Blowing

Rule 70—Gasoline Storage and Transfer

Rule 74.3—Paper, Fabric, and Film Coating

Rule 74.4—Cutback Asphalt

Rule 74.5—Dry Cleaning

Rule 74.6—Degreasers

Rule 74.8—Vacuum Producing Systems, Wastewater Separators and Process Turnarounds

Rule 80—Fermites

Rule 85—(deleted) Non-Complying Heaters

Rule 103—Stack Monitoring

Yuba County Air Pollution Control District

Rule 1.1—Definitions

Rule 2.0—Open Fires

Rule 2.1—Exception to Rule 2.0

Rule 2.3—Burning on "No Burn" Days

Rule 2.5—Permit Regulations

Rule 2.6—Burning Hours

Rule 2.7—Agricultural Burning

Rule 2.9—Prohibited Burning

Rule 2.11—Fire Prevention

Rule 2.16—Cost of Putting Out a Fire

There are a wide variety of rules covered by this notice. They include open burning rules, permit rules, and administrative rules. The types of changes include removal of dates that have passed and are no longer relevant, name changes, clarifications of language, and reorganization of rules.
Evaluation

All these rules have been evaluated and found to be consistent with the Clean Air Act, EPA policy and 40 CFR Part 51. EPA’s detailed evaluation of the rules can be inspected at EPA’s Region 9 office in San Francisco.

EPA Action

This notice approves the rule revisions listed above in the Supplementary Information section and incorporates them into the California SIP. It also corrects a mistaken incorporation of Rule 210 into the SIP for the North Coast Air Basin districts of California.

EPA is taking final action on the submittals listed in this notice without a prior proposal and an opportunity for public comment. This is being done because the amendments are not controversial and no adverse comments are anticipated. This action will be effective 60 days from the date of this Federal Register, unless EPA receives notice within 30 days of publication that adverse or critical comments will be submitted. If a notice of critical comments or comments themselves are received, this action will be modified before the effective date. That will be done by publishing two notices. One notice will withdraw the final action for the rules that are being commented on. The second notice will begin a new rulemaking by announcing a proposal of the action and establishing a comment period.

Rule 210 was incorporated into the SIP for the North Coast districts on July 31, 1986. EPA incorporated it in the erroneous belief that it had been officially submitted. Such was not the case. Rule 210 addresses Environmental Assessments, which EPA does not act on. The districts affected are the North Coast Unified AQMD, the Mendocino County APCD, and the Northern Sonoma County APCD.

Regulatory Process

The Office of Management and Budget has exempted this rule from the requirements of section 3 of Executive Order 12291. Under 5 U.S.C. 605(b), I certify that this revision will not have a significant economic impact on a substantial number of small entities. (See 46 FR 6706.)

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by June 16, 1987. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

Incorporation by reference of the State Implementation Plan for the State of California was approved by the Director of the Federal Register on July 1, 1982.

Last of Subjects in 40 CFR Part 52


Dated: October 8, 1986.

Lee M. Thomas,

Administrator.

PART 52—[AMENDED]

Subpart F of Part 52, Chapter I, Title 40 of the Code of Federal Regulations is amended as follows:

Subpart F—California

1. The authority citation for Part 52 continues to read as follows:

Authority: 42 U.S.C. 7401–7482.

2. Section 52.220 is amended by revising paragraphs (c)(124), (vi)(B), (vii)(B), (viii)(B), (ix)(B), and (x)(B) so that they read as follows:

(c) * * *(124) * * *

(vi) Del Norte County APCD.

(B) New or amended rule 230, adopted December 14, 1981.

(vii) Humboldt County APCD.

(B) New or amended rule 230, adopted December 8, 1981.

(viii) Mendocino County APCD.

(B) New or amended rules 130 (introductory text, b.1, m.1, p.5, and s.2), and 230, adopted January 5, 1982.

(ix) Northern Sonoma County APCD.

(B) New or amended rules 130 (introductory text, b.1, n.1, p.5, and s.2), 220(c), 230, and 260, adopted February 23, 1982 and rule 200, adopted June 15, 1982.

(x) Trinity County APCD.

(B) New or amended rule 230, adopted December 7, 1981.

(164) Revised regulations for the following APCD’s were submitted on October 16, 1986 by the Governor’s designee.

(a) Incorporation by Reference.

(i) Amador County APCD.


(b) Northern Sonoma County APCD.

(i) Amended rules 100, 120, 130 (d1 and e5), 500, 520, 600, and 610, adopted 2/22/84, and amended rule 200(a), adopted 7/19/83.

(c) Ventura County APCD.

(i) Amended rules 15, 54, 61, 64, 67, 69, 70, 74.3, 74.4, 74.5, 74.6, 74.8, 80, and 103, revised 7/5/83.

(ii) Previously approved and now removed (without replacement). Rule 84.

(d) Yuba County APCD.

(i) Amended rules 1.1, 2.0, 2.1, 2.3, 2.5, 2.6, 2.7, 2.8, 2.9, 2.11, and 2.18, adopted 3/5/85.

(165) Revised regulations for the following APCD’s were submitted by the Governor’s designee on November 12, 1985.

(ii) Incorporation by Reference.

(A) Northern Sonoma County APCD.

(i) Amended rule 130 #4, adopted 7/9/85.

(B) South Coast Air Quality Management District.

(ii) Amended rule 221, adopted 1/4/85.

[FR Doc. 87–4273 Filed 4–18–87; 8:45 am]

BILLING CODE 6560–50–M

40 CFR Part 52

[A–4–FRL–3188–2]

Approval and Promulgation of State Plans, North Carolina; Minor Revisions to State Implementation Plan

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: On February 25, 1986, the North Carolina Division of Environmental Management submitted regulatory amendments for incorporation into their federally approved state implementation plan (SIP).

Regulation 2D.0501, concerning compliance with emission control standards, is being changed to correct errors, delete unnecessary phrases, and add clarity. Regulations 2D.0508, 0509, 0514, and 0916 are being changed to add words that had been left out and to delete extra words and phrases. Regulation 2D.0635 (Malfunctions. Startup and Shutdown) is being changed so that startup and shutdown emissions...
can never be excused as malfunctions. The excess emissions that occur during startup and shutdown will only be regulated by section .0535(g), specifically intended for those conditions. Regulation 2D.0535(g) was disapproved by EPA on September 9, 1986 (51 FR 32073). All excess emissions, including those during startup and shutdown, are considered violations. Until .0535(g) if federally approved there will be no other procedure except enforcement to deal with excess emissions during startup and shutdown.

DATE: This action will be effective on June 16, 1987, unless notice is received with 30 days that someone wishes to submit adverse or critical comments.

ADDRESSES: Copies of the material submitted by the State may be examined during normal business hours at the following locations:
- Public Information Reference Unit, Library Systems Branch, U.S. EPA, 401 M Street, S.W., Washington, DC 20460
- United States Environmental Protection Agency, Region IV App Programs Branch, 345 Courtland Street, N.E., Atlanta, Georgia 30306
- Division of Environmental Management, North Carolina Department of Natural Resources and Community Development, 512 North Salisbury Street, Raleigh, North Carolina 27611

FOR FURTHER INFORMATION CONTACT: Mr. Bob Peddicord, Air Programs Branch, U.S. EPA Region IV, at the above address and telephone number 257-2864 or commercial (404) 547-2864. Comments should be addressed to Mr. Peddicord.

SUPPLEMENTARY INFORMATION: On February 25, 1986, the State of North Carolina submitted ten (10) minor revisions to their state implementation plan. The revisions were adopted by the Environmental Management Commission on February 13, 1986, after a public hearing held on November 15, 1985.

The regulations amended were: 15 NCAC 2D.0501, .0508, .0509, .0514, .0524, .0533, .0535, .0535, .0535, .0535, and .0535. EPA approves: 2D.0501, .0508, .0509, .0514, .0533, and .0535, in order to make them federally enforceable.

Regulation 2D.0533 (Stack Height) 2D.0917 (Auto & Light Duty Truck Manufacturing) and 2H.0003 (Permits) are being processed in separate notice. Regulation 2D.0524 is a new source performance standard and is also being processed separately.

The amendments approved in the present notice are now described.

2D.0501 Compliance with Emission Control Standards. The amendments clarify this regulation by removing unnecessary phrases. Upon this clarification the testing and sampling methods described in the regulation are more easily understood.

2D.0508 Control of Particulates from Pulp and Paper Mills. The amendments to this regulation simply add words and phrases that had been inadvertently omitted.

2D.0509 Particulates from Mica or Feldspar Processing Plants. The changes to this regulation consist of adding words and units that were left out originally. This was done for clarity.

2D.0535 Malfunction, Startup, and Shutdown. The State's intent is to have the emission-excesses that occur during startup and shutdown regulated only by the par of the regulation intended to do that (.0535(g)). To accomplish this they stated that those excesses do not fall under the malfunction section (.0535(c)).

2D.0816 Determination: VOC emissions from Bulk Gasoline Terminals. The change in this regulation clarifies a reference made to the Code of Federal Regulations.

Final Action

Since the amendments to regulations 2D.0501, .0508, .0509, .0514, .0533, and .0535 are consistent with EPA policy and requirements, they are hereby approved. EPA is publishing this action without prior proposal because the agency views this as a noncontroversial amendment and anticipates no adverse comments. This action will be effective June 16, 1987 unless notice is received within 30 days of its publication that someone wishes to submit adverse or critical comments. If such notice is received, this action will be withdrawn and two subsequent notices will be published before the effective date. One notice will withdraw the final action and the other will begin a new rulemaking by announcing a proposal of the action and establishing a comment period. If no such notice is received, the public is advised that this action will be effective June 16, 1987.

Under 5 U.S.C. 605(b), I certify that these SIP revisions will not have a significant economic impact on a substantial number of small entities. (See 49 FR 8798).

Under section 307(b)(2)(1) of the Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by June 16, 1987. This action may not be challenged later in proceedings to enforce its requirements. (See section 307(b)(2).)

The Office of Management and Budget has exempted this rule from the requirements of section 3 of Executive Order 12291.

List of Subjects in 40 CFR Part 52

Air pollution control, Particulate matter, Intergovernmental relations, Incorporation by reference.

Note—Incorporation by reference of the State Implementation Plan for the State of North Carolina was approved by the Director of the Federal Register on July 1, 1982.


Lee M. Thomas,
Administrator.

PART 52—[AMENDED]

Part 52 of Chapter, Title 40, Code of Federal Regulations is amended as follows:

1. The authority citation for Part 52 continues to read as follows:

Authority: 42 U.S.C. 7401-7442.

Subpart II—North Carolina

2. Section 52.1770 is amended by adding paragraph (c)(52) to read as follows:

§ 52.1770 Identification of plan.
   (c) * * * * *
   (52) Minor revisions to Title 15 of the North Carolina Administrative Code (15 NCAC) were submitted to EPA on February 25, 1986.
   (i) Incorporation by reference.
   (A) Letter of February 25, 1986 from the State of North Carolina to EPA, and Amendments in the following regulations which were adopted by the North Carolina Environmental Management Commission on February 13, 1986:
   2D.0501 Compliance with Emission Control Standards
   2D.0508 Control of Particulates from Pulp and Paper Mills
   2D.0509 Particulates from Mica and Feldspar Processing Plants
   2D.0514 Control of Particulates from Ferrous Jobbing Foundries
   2D.0535 Malfunctions, Startup and Shutdown
   2D.0816 Determination: VOC Emissions from Bulk Gasoline Terminals
   (ii) Other material—None.

[FR Doc. 87-8673 Filed 4-19-87; 8:45 am]
BILLING CODE 6560-50-M
Pesticide Tolerance for Sodium Salt of Fomesafen

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This rule establishes a tolerance for residues of the herbicide sodium salt of fomesafen in or on soybeans. This regulation to establish the maximum permissible level for residues of sodium salt of fomesafen in or on soybeans was requested by ICI Americas, Inc.

The Agency has evaluated dietary exposure to fomesafen residues for the commodity proposed, using extreme worst-case assumptions. Assuming that 100 percent of the soybean crop will have residues at the tolerance level (0.05 ppm), using a multistage model the upper limit on dietary oncogenic risk is calculated to be 2.2 incidences in one million (2.2 X 10^-9). Actual risk will be less, since not all of the soybean crop will be treated, and those crop treated and sold will have residues less than 0.05 ppm.

Based on the NOEL of 0.25 mg/kg/day in the rat oncogenicity study and a hundredfold safety factor, the acceptable daily intake (ADI) has been set at 0.0025 mg/kg/day with a maximum permissible intake of 0.15 mg/day for a 60-kg person. These tolerances have a theoretical maximum residue contribution of 0.0000115 mg/day in a 1.5-kg diet and would utilize 0.46 percent of the ADI.

There are no regulatory actions pending against the registration of sodium salt of fomesafen. The metabolism of sodium salt of fomesafen in plants and animals is adequately understood for purposes of the tolerances set forth below. However, additional clarification is needed for a subset of the rat metabolism study in which multiple dosing was used. An analytical method, electron detection gas chromatography, is available for enforcement purposes. Because of the long lead time from establishing this tolerance to publication of the enforcement methodology in the "Pesticide Analytical Manual Volume II," the analytical methodology is being made available in the interim to anyone interested in pesticide enforcement when requested by mail from:


Office location and telephone number: Rm. 223, CMF#2, 1921 Jefferson Davis Highway, Arlington, VA 22202.

There is no expectation of secondary residues in meat, milk, poultry, and eggs.

Based on the information cited above, the Agency has determined that establishing the tolerances for residues of the pesticide in or on the listed commodity will protect the public health. Therefore, tolerances are established as set forth below.

Any person adversely affected by this regulation may, within 30 days after publication of this notice in the Federal Register, file written objections with the Hearing Clerk, at the address given above. Such objections should specify the provisions of the regulation deemed objectionable and the grounds for the objections. If a hearing is requested, the objections must state the issues for the hearing and the grounds for the objections. A hearing will be granted if the objections are supported by grounds legally sufficient to justify the relief sought.

The Office of Management and Budget has exempted this rule from the requirements of section 3 of Executive Order 12291.

Pursuant to the requirements of the Regulatory Flexibility Act (Pub. L. 96-354, 94 Stat. 1164, 5 U.S.C. 601-612), the Administrator has determined that regulations establishing new tolerances or raising tolerance levels or establishing exemptions from tolerance requirements do not have a significant economic impact on a substantial number of small entities. A certification statement to this effect was published in the Federal Register of May 4, 1981 (46 FR 29950).

(Section 408(e), 66 Stat. 514 (21 U.S.C. 346a(e)))
List of Subjects in 40 CFR Part 180

Administrative practice and procedure, Agricultural commodities, Pesticides and pests.

Douglas D. Campt,
Director, Office of Pesticide Programs.

PART 180—[AMENDED]

Therefore, 40 CFR Part 180 is amended as follows:

1. The authority citation continues to read as follows:


2. New § 180.433 is added, to read as follows:

   § 180.433 Sodium salt of fomesafen; tolerance for residues.

   Tolerances are established for the residues of sodium salt of fomesafen, 5-
   [2-chloro-4-(trifluoromethyl)phenoxy]-N-(methylsulfonyl)-2-nitrobenzamide, in or
   on soybeans at 0.05 part per million.

[FR Doc. 87–8675 Filed 4–16–87 8:45 am]
BILLING CODE 6560–50–M
**Proposed Rules**

This section of the FEDERAL REGISTER contains notices to the public of the proposed issuance of rules and regulations. The purpose of these notices is to give interested persons an opportunity to participate in the rule making prior to the adoption of the final rules.

DEPARTMENT OF AGRICULTURE

Food and Nutrition Service

7 CFR Part 246

Special Supplemental Food Program for Women, Infants and Children; Funding Formula

AGENCY: Food and Nutrition Service. USDA.

ACTION: Proposed rule.

SUMMARY: The Department proposes to amend the WIC Program Regulations by adding language describing in greater detail the formula through which the Department shall allocate program funds to State agencies. This proposed amendment would also entail a change in the formula itself. Because it is not possible to serve all eligible persons, a formula is needed that would place greater emphasis on the efficient use of funds, and on the targeting of available resources to serve persons most in need. In accordance with this amendment, which embodies the necessary formula, the Department would henceforth allocate funds to State agencies based not only on each State agency's current operating level and extent of potential eligibles to be served, but also on its success in reaching persons at greatest nutritional risk. Use of this formula would commence with the Fiscal Year 1988 funds allocation. The Department expects that the use of this formula would encourage State agencies to serve the maximum number of high risk persons within the limits of available funding.

DATE: Comments on the proposed rule must be received on or before June 1, 1987

ADDRESS: Comments may be mailed to Patrick J. Clerk, Director, Supplemental Food Programs Division, Food and Nutrition Service, USDA, 3101 Park Center Drive, Room 407, Alexandria, Virginia 22302, (703) 758-3746.

SUPPLEMENTARY INFORMATION:

Classification

This proposed rule has been reviewed under Executive Order 12297 and has been determined to be not major. The Department does not anticipate that this rule would have an impact on the economy of $100 million or more. This rule would not result in a major increase in costs or prices for consumers; individual industries; Federal State or local government agencies; or geographic regions. Nor would this rule have a significant adverse effect on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

This rule has been reviewed with regard to the requirements of the Regulatory Flexibility Act (5 U.S.C. 601-612). Pursuant to that review, the Administrator of the Food and Nutrition Service has determined that this proposed rule does not have a significant economic impact on a substantial number of small entities. This rule does not contain reporting or recordkeeping requirements subject to approval by the Office of Management and Budget in accordance with the Paperwork Reduction Act of 1980 (44 U.S.C. 3507).

This program is listed in the Catalog of Federal Domestic Assistance Programs under No. 10.557 and is subject to the provisions of Executive Order 12372, which requires intergovernmental consultation with State and local officials (7 CFR Part 3015, Subpart V, and final rule related notice published June 24, 1983 (48 FR 29714)).

Background

Statutory Requirements

The Department's authority to prescribe a WIC funds allocation formula is found in section 17 of the Child Nutrition Act (CNA) of 1966 (42 U.S.C. 1786). Section 17 (l) requires the Department to "divide among the State agencies, the funds provided in accordance with this section on the basis of a formula determined by the Secretary." Section 17 (g) authorizes the Secretary to use one-half of 1 percent of the funds appropriated each fiscal year for the WIC Program, not to exceed $3 million, "for the purpose of evaluating program performance, evaluating health benefits, and administration of pilot projects, including projects designed to meet the special needs of migrants, Indians and rural populations." Public Laws 99-500 and 591, enacted October 17, 1986, amended the CNA. The legislation expanded the use of evaluation funds to include the preparation of the participation report required under subsection (d)(4), and the provision of technical assistance to improve State agency administrative systems. Section 17(h)(1) of the CNA then requires the Secretary to "make 20 percent of the funds provided under this section each fiscal year (other than funds expended for evaluation and pilot projects under subsection (g) of this section) available for State agency and local agency administrative costs." In summary, the authorizing legislation permits the Department to deduct "evaluation funds" from the total funding available, and requires that the balance be allocated to State agencies in a ratio of 80 percent for food and 20 percent for administration and program services costs.

The legislation amending the CNA placed an additional requirement upon the allocation of funds to State agencies for Fiscal Year 1987 and thereafter. A new paragraph 17(g)(C) was inserted, directing the Department to allocate funds to State agencies in a manner that makes a prescribed amount of funds available first for service to eligible migrant populations. The prescribed level of such migrant funding is ninetenths of 1 percent of the sums appropriated for each fiscal year.

Current Funding Formula

The formula currently in use emerged from extensive consultations between the Department and the State agencies, held during the latter portion of Fiscal Year 1983. The State agencies generally agreed that the most equitable type of funds allocation at that time would be one based on each State's relative number of potential WIC eligibles but that existing program operations should not be disrupted in order to achieve that objective. For example, a State agency that had already extended program benefits to a relatively large number of its potential eligibles should not be required to reduce its funding level to make funds available for program
expansion in States which had not. These considerations led to the formulation of two basic funding principles: stability funding and directed program growth. These principles form the basis for the two part formula currently in use.

1. Stability Funding

In allocating funds to State agencies, first priority is given to maintaining each State agency's existing operating level to the extent that funds are available. Accordingly, every State agency receives an amount of funds for food costs based on the amount it received the prior year adjusted for anticipated inflation. This amount is reduced for any State agency that failed to use at least 95 percent of its prior year food funding (stability and growth combined), as an inducement for State agencies to use all funds allocated to them (without overspending). The reduction is calculated by subtracting the State agency's actual, prior-year food cost from 95 percent of the food funds it received for the prior fiscal year.

Funding for administration and program services costs is calculated as a percentage of the State agency’s food funding level. Every State agency must be funded at the full stability level before any funds are allocated through the growth formula.

2. Growth Funding

Once the stability funding requirements have been satisfied, any funds remaining available are allocated through the growth formula. This formula was designed to move the WIC Program toward the long-term objective of enabling each State agency to serve the same proportion of its potentially eligible women, infants and children. Accordingly, the growth formula is based on each State's relative number of persons below 185 percent of the Poverty Income Guidelines, its infant mortality and its low-weight births. The Department uses the formula to determine what each State agency’s proportionate share of the funds available for allocation would be if all such funds were allocated solely on the basis of these factors; this figure is known as the State agency’s “growth share.” A State agency qualifies for growth funding to the extent that (1) its growth share exceeds what is provided under the stability formula; and (2) funds are available for growth funding. As with the stability formula, each State agency receives an amount of food funds generated by the formula, plus a related amount of administrative funding.

Concerns About the Existing Formula

The Department first used the allocation formula described above to determine each State agency's Fiscal Year 1984 funding level, and has retained it in substantially the same form since that time. While the use of this formula has generally promoted the dual objectives of program stability and controlled program growth, it has not discriminated between those State agencies that have used their funds efficiently and effectively and those that have not. All States have received stability grant increases based solely on an economic indicator (inflation). In addition, growth States received grant increases based on demographic data only. In neither case has consideration been given to how efficiently and effectively each State agency utilized the grant it received.

There is one dimension of State efficiency and effectiveness that the Department considers most reflective of a State agency’s management of its grant. This is the targeting of benefits to the highest risk eligibles.

Efforts To Revise the Existing Formula

Alternative Formula Proposed by the Department

It is the Department's intent to initiate a revised formula that responds to the concerns discussed above. On September 9, 1986, the Department published a proposed rule encompassing an alternative formula for allocating funds to State agencies. Under this proposed formula, the stability funding concept would have been retained but redefined to exclude the annual adjustment for anticipated inflation. Each State agency would have received its prior year food grant for stability food funding unaadjusted for inflation. Residual funds (that is, funds remaining available for allocation after every State agency had been funded at its full stability level) would have been allocated among all State agencies on the basis of their relative success in identifying and serving the highest risk persons within their eligible populations. For this purpose, “highest risk” would have been defined as women, infants and children enrolled in Priorities I, II and III.

Additional features of the proposed formula included:

* Retention of the 95 percent performance standard.
* Crediting each State agency’s prior year operating level with 50 percent of the food funds it had voluntarily made available for recovery, for purposes of calculating the State agency’s stability food funding level. This feature had been conceived as an incentive for State agencies to return unneeded funds for reallocation.
* Adjustment of each State agency’s enrollment in Priorities I through III by its “participation rate.” This adjustment had been designed to factor each State agency’s relative success in enhancing the efficiency of food funds usage by only considering enrollees that received food or a food instrument.
* Capping each State agency’s combined stability and residual food funding level. The State agency’s food grant would have been precluded from exceeding the amount needed to serve 100 percent of the State agency’s reported income-eligible population.

This funding cap would have prevented the allocation of more funds to a State agency than could realistically be used. The growth funding formula has been designed to reward those State agencies that had successfully targeted Program benefits to persons in the three highest priority groups. It was intended for implementation in Fiscal Year 1987.

Comments and Consultations

Comments on the proposed rule were accepted until November 9, 1986. Altogether, 647 comments were received.

Many commentors took exception to the Department’s announced intent to initiate the revised funding formula during Fiscal Year 1987. They contended that State agencies had already planned and budgeted on the basis of grants they could expect to receive under the existing formula; changing in mid-year would disrupt program operations.

During the comment period, the enactment of Pub. L. 99-500 and Pub. L. 99-561 limited the Department’s discretion with regard to implementation. This legislation attached the following proviso to the Fiscal Year 1987 WIC appropriation:

"that none of the funds provided herein shall be used to issue interim or final regulations before May 1, 1987 to modify the formula used during Fiscal Year 1988 to divide funds among State agencies under section 17(l) of [the CNA] to carry out [the Program], or to implement such regulations before October 1, 1987."

In the conference report on this legislation, the Congress further directed the Department to issue a final funding regulation “as soon after May 1 as possible, and in no case later than July 1, 1987” with an implementation schedule to coincide with the beginning of the fiscal year.

The conference report expressed the Congressional expectation that “this timetable will allow States to plan for and properly implement any new..."
Federal Register / Vol. 52, No. 74 / Friday, April 17 1987 / Proposed Rules

12529

State agencies under a revised formula intends to commence allocating funds to Sess. 403 formula. H.R. Rep. Department consulted with the response to this statement, the and other interested parties.

The new regulation should be promulgated after arriving at a consensus with the State WIC directors and other interested parties. In response to this statement, the Department consulted with the WIC community over and above the solicitation and analysis of public comments in support of the Federal rulemaking process.

Consultations between the Department and the National Association of WIC Directors (NAWD) were initiated. The NAWD identified a set of principles which they felt any funding formula developed should be expected to satisfy. These principles, as well as concerns expressed by other commentors, will be discussed later in this preamble in connection with the particular formulaic and programmatic issues to which they relate. Having identified these principles, the NAWD addressed the mechanics of a formula that they believed met these principles and formalized that suggested formula as a comment to the September 9 proposed rule. The majority of formal comments subsequently received by the Department substantially endorsed the NAWD's recommended formula and principles.

The Department has reviewed the NAWD proposed formula and has determined that, with some exceptions, the formula put forth by the NAWD addresses the Department's major policy objectives while accommodating many of the objections raised by commentors to the Department's initial proposal. One major principle underlying the NAWD's recommendations was that the funding formula should provide for both growth and targeting. Further, the NAWD advocated that when growth funds exist, greatest growth opportunity should be provided to high need, highly targeted State and Indian agencies, but that some growth opportunity should also be provided to either high need or high targeted State and Indian agencies.

Funding Formula Reproposed

After considering all comments, the Department has concluded that an alternative formula to that proposed in the September 9 rule would accomplish the objective of targeting funds to State agencies with the best targeting performance. The formula the Department now proposes is described below; detailed explanations of its constituent parts are presented in the discussion of formulaic issues later in this preamble. Under this proposed formula, WIC food funds would be allocated to State agencies as follows:

1. Stability Funding. To the extent that funds are available, each State agency would receive stability food funds equal to its prior year grant level increased by an inflation factor. The factor would be determined on the basis of each State agency's service to persons imputed to be in Priorities I through III. This is referred to as the "targeted inflation" element. The 95 percent performance standard and the 50 percent voluntary recovery credit would be retained as presented in the September 9 proposed rule.

2. Residual Funding.

• Targeting Component. Fifty (50) percent of any residual funds would be allocated through the existing growth formula. However, the Department would adjust the growth shares for Alaska, Guam, Hawaii and any Indian State agencies located within their borders by the same factors used to adjust payments to these States under the Thrifty Food Plan Index, before determining whether these State agencies' growth shares exceeded the amounts provided them under the stability and targeting components.

Thus, each State agency would receive for food costs each fiscal year the sum of the amounts generated under the stability, targeting and growth components except that each State agency would be limited to a 15 percent increase over its prior year's food grant. The 15 percent cap is intended to limit the increase a State agency receives to an amount that realistically can be utilized. Every State agency would receive stability funds and every State agency serving Priority I persons would receive targeting funds; however, only those State agencies qualifying as growth States through the operation of the existing growth formula would receive growth funds. If the sum of the stability, targeting and growth amounts for any Indian State agency is less than the amount necessary to meet the anticipated rate of inflation, the sum would be increased to reflect the anticipated inflation level.

For commentors who are interested in reviewing the full formula database and mathematical operations, an information package is available. Copies of the document will be forwarded to all State agencies administering the WIC Program and to all FNS regional offices. Copies will also be made available to other interested parties upon their request. Requests should be submitted in writing to the addressee identified at the opening of this preamble.

The provisions of this proposed rule do not address planned changes to the formula to be used to allocate funds for administrative and program services costs. Commentors responding to the September 9, 1986, proposed rule were invited to offer recommendations for such a revision, but few did so. The proposed regulatory language set forth in this document states the formula currently used for determining State agencies' administrative and program services grants.

Programmatic and Formulaic Issues

During the evolution of the formula the Department now proposes, the NAWD, other commentors, the

NAWD, other commentors, the
Department and other interested parties identified a number of programmatic and formulaic issues. These issues may be broadly classified into two generic categories: issues involving the general conception of the formula, and issues involving one or more of the formula’s constituent parts.

**General Conception of the Formula**

1. **Formula Objectives**

   The formula currently in use was designed to promote the dual policy objectives of stability and growth. The September 9 proposed rule would have substituted targeting for growth. The formula now proposed reflects three policy objectives: Stability, targeting and growth.

   a. **Stability.** All commentors who addressed the matter of inflation objected to redefining stability funding in a way that totally excluded allowances for inflation. They maintained that a “stability” food grant without inflation would not provide stability because rising costs would make food grants worth less in real terms. Comments on this matter generally asserted that every State agency should be guaranteed a funding level equal to its prior year grant plus inflation. To achieve this, some commentors recommended the “targeted inflation” method while others stated that the mechanics of the inflation adjustment must depend on the nature of the rest of the formula. The Department has adopted the targeted inflation approach, but has provided an exception for Indian State agencies. This exception will be discussed in detail later in this preamble.

   New definitions of stability and residual funds have been inserted in the “Definitions” section of the regulations.

   b. **Targeting.** Some commentors questioned the appropriateness of targeting as a policy objective to be pursued through funding decisions. In their view, the priority system has been established as a management tool and has no application to a funding formula. It was also asserted that the existing distribution of Program enrollment among priority groups demonstrates that targeting has already been achieved. Since over 75 percent of the national WIC caseload already consists of persons in Priorities I through III, expecting to achieve a higher level of enrollment in these priority groups may be unrealistic. The Department notes, however, that approximately 48 percent of the persons enrolled in the top three priority groups are Priority III children while only 15 percent are Priority I pregnant women. Consequently, the Department believes most State agencies can achieve further targeting.

   In addition, a number of commentors asserted that the method of allocating residual funds presented in the September 9 proposed rule could not achieve its stated objective of promoting targeting. These commentors maintained that State agencies with large programs would receive residual funds on the basis of large numbers of high risk persons, regardless of whether these numbers represented effective targeting. Residual funds would be allocated primarily to “stability” States, where they would end up supporting low priority persons, while States with unserved high risk populations would be penalized. Thus, these commentors contended, the proposed formula would have both frustrated targeting and perpetuated current inequities. While the Department recognizes that the proposed formula has altered the current distribution of funds among State agencies, the Department believes that well targeted State agencies would have received more funds relative to other States under the formula.

   With respect to the appropriate approach to targeting, many commentors expressed concern about how targeting should be defined. The NAWD and other commentors agreed with the Department’s position that targeting means service to the highest risk women, infants and children, but recommended that the targeting concept refer only to Priority I pregnant women and infants. Some commentors favored defining targeting as service to persons in Priorities I and II. The definition set forth in the September 9 proposed rule had been adopted, however, because many interested parties considered any definition narrower than Priorities I through II inappropriate. The Department received much input from interested parties to the effect that such a definition would “symbolically disenfranchise” children from the Program. Some commentors considered even the proposed definition too restrictive. They expressed concern that allocating funds on the basis of enrollment in the top three priority groups signalled a trend toward downplaying the eligibility of persons qualifying for Priorities IV through VII. These commentors stressed the need to preserve the Program’s preventive function; they perceived the proposed formula as a step toward making WIC a purely therapeutic program which might generate some short-term savings at the price of long-term health care costs.

   The Department agrees that expanding the definition of targeting beyond the top three priority groups would undermine the targeting concept’s credibility. On the other hand, the limited availability of residual funds, only half of which would be allocated through the targeting component, requires the Department to recognize different degrees of need for Program services within the overall targeting definition.

   These two viewpoints are reconciled in the formula now proposed by applying different definitions of targeting to different parts of the formula. In the formula’s stability component, the targeted inflation allocation is based on service to Priorities I through III. This encompasses a majority of participants, and is therefore compatible with the stability concept of maintaining each State agency’s existing operating level. Every State agency must receive its full stability funding level before any funds are allocated through the two residual components, so funds are first directed to the stability component.

   If funds remain after stability funding is allocated, the targeting component of the residual funding allocation assigns funds on the basis of service to each State agency’s expected number of Priority I persons only. This definition of targeting is broader than the one used in the formula recommended by the NAWD, in that it also includes breastfeeding women. The Department recognizes that excluding this participant category was inconsistent with a policy of encouraging postpartum women to breastfeed. This expanded definition is intended to address this concern.

2. **Growth.** The formula set forth in the September 9 proposed rule would have allocated all residual funds on the basis of targeting. This represented changing concerns about Program operations. The existing growth concept had originally been formulated as a long-term mechanism to correct past inequities in the distribution of funds to State agencies. The Department had considered the proposed targeting component equitable because every State agency would have had the opportunity to compete for residual funds; the operation of the growth formula excludes nearly half the geographic State agencies and virtually all Indian State agencies from receiving funds beyond their stability levels.

   Nevertheless, the majority of commentors objected to this feature of the Department’s proposal. Many maintained that the heretofore “growth” State agencies could only effect targeting initiatives if funded to grow.

   Further, the NAWD stated that any WIC
funding formula should consider both targeting and growth, advocating that the latter be defined as the existing growth formula. Support for the preservation of a “growth” factor in the formula was prevalent among commentors received. Accordingly, the formula now proposed provides growth the same importance as targeting.

2. Data Base for Formula

a. Growth Portion. The data used in the growth formula has recently been criticized as outdated. The growth formula is based on the number of persons in each State who are income eligible for the WIC Program. The income-eligible population (i.e., the number of women, infants and children below 185 percent of the Poverty Income Guidelines) is derived from 1980 Census data (which reflects 1979 incomes). While more recent data on family incomes has been collected for some States, the 1980 Census data remains the only valid national, uniform dataset drawn from the universe of all States. Therefore, all funds allocations in which the income-eligible population is a factor will continue to use the 1980 Census data. However, the Department will continue to review alternatives for better data on State agency potential eligible populations, and commentors are invited to recommend alternative national data sources.

In addition, since the income-eligible population that is used in the growth component of the formula represents the universe of women, infants, and children meeting the income criterion, the Department is seeking comments as to whether or not an adjustment should be made to recognize the existence of the Commodity Supplemental Food Program (CSFP), since both programs serve the same target population. For example, in States where both programs are operational, an adjustment could be made to recognize the income eligible population served through the CSFP in the State.

b. Data on Priority Level of Participants Served. Since targeting has been defined as service to persons in specific priority groups, the proposed formula’s targeting component depends on the availability of data for measuring the extent to which State agencies have achieved this objective. The Department currently collects two classes of data pertaining to persons on the Program: those enrolled and those who participate. Participation has been defined as the number of persons who receive food or food instruments during the reporting period; enrollment refers to the number of persons authorized to participate. Participation data is currently collected only by women-infants-children, while enrollment is reported by both category and priority.

The September 9 proposed rule called for the use of enrollment data to measure targeting success. The Department considered this proposal appropriate because enrollment is the only data format currently structured according to the nutritional risk priority system. Nevertheless, many commentors objected to its use. Their principal objections included assertions that:

- The data depend on the use of nutritional risk criteria that vary from State to State.
- The data reflect State agencies’ nonuniform policies for reporting breastfed infants.
- The data do not fairly represent some States’ caseloads.
- The data lack accuracy and timeliness.

Each of these objections is discussed in turn below.

(1) Varying nutritional risk criteria. Numerous commentors pointed out that certifying officials assign persons to priority groups according to criteria that vary from State to State. Because a woman qualifying for Priority I in State A may qualify only for Priority IV in State B, Priority I enrollment/participation data for the two States may not be validly compared or aggregated. Many commentors maintained that the flexibility to set their own nutritional risk criteria had been a key ingredient in State agencies’ ability to integrate the WIC Program into their respective States’ health care networks, and did not want to see this situation changed.

While nutritional risk criteria themselves lie outside the scope of this proposal, devising a method to achieve comparability of priority data would make funding decisions based on targeting more equitable. To this end, the Department is proposing the following method:

- Use of participation data rather than enrollment data in the formula’s targeting elements.
- Conversion of the participation data as collected into priority data by applying percentages derived from enrollment data. For example, if 68 percent of all women enrolled are in Priority I, that percentage would be applied to the total number of women each State agency reported participating in order to impute the number of Priority I women participating in that State agency’s program.

The implementation of these proposals would minimize the effects of nonstandardized risk criteria on data used in the formula.

(2) Nonuniform policies on reporting breastfed infants. Some State agencies recognize breastfed infants as enrolled in the Program. Since food instruments are not issued to such infants, they do not technically meet the regulatory definition of “participation.” The existence of a class of persons that are enrolled but do not participate poses problems for both the Department and the State agencies.

Commentors pointed out that many breastfeeding women participate as part of breastfeeding dyads. Program regulations provide that both members of such a dyad may be certified in the highest priority group for which either the woman or her infant qualifies. This provision clearly encourages the targeting of program benefits to breastfeeding dyads. However, no targeted funding formula can reward State agencies commensurate with their success in this area unless both enrollment and participation data reflect the breastfed infants as well as their mothers.

In addition to the problems State agencies may encounter in receiving credit for targeting to breastfed infants, these infants pose a problem for the Department parallel to that posed by nonstandardized nutritional risk criteria. Data reported by State agencies that enroll breastfed infants is not truly comparable to that reported by State agencies that do not. Aggregating such dissimilar data for use in a funding formula may inadvertently penalize some State agencies. Thus, the nonrecognition of these infants as served by the Program is counterproductive to targeting, as well as to the Department’s policy of promoting breastfeeding.

For all these reasons, the Department proposes revising the regulatory definitions of “participants” and “participation” to include breastfed infants. These revised definitions would become effective upon publication of the final rule, in order to allow State agencies that do not currently report breastfed infants time to develop procedures for doing so.

(3) Nonrepresentative data. It was alleged that priority data collected only in October and March did not fairly present the level and composition of every State agency’s caseload. The most frequently cited example was the migrants, who arrive in Florida after October and leave before March but whom the Florida WIC Program must serve in the interim. The Department’s proposal to measure targeting by
would be subjected to a concomitant reduction.

The Department remains convinced that the 95 percent standard is a valuable incentive for State agencies not to take funds which cannot be utilized. However, the Department also recognizes the urgency of preventing State agencies from being penalized by good faith efforts to promote the Department's policies. The recent change in the law (Pub. L. 99-500 and 99-591) which allows each State agency to carryover up to 1 percent of its current year's allocation into the next fiscal year without affecting the amount of funds allocated to the State agency for the next fiscal year, should provide some relief to any State agency that initiates efforts to seek efficiencies in its food delivery system without adversely affecting its grant for the next fiscal year.

2. Voluntary Recoveries

The formula proposed on September 9 contained a provision regarding the voluntary return of funds to the Department. Few commentors addressed this provision. The provision had been designed to encourage State agencies to return unneeded funds. The Department considers such an incentive essential to effective funds management, and this provision is retained in the rule now proposed.

3. Special Provisions for Indian State Agencies

The September 9 formula contained a provision for testing grant levels generated by the formula against the cost of serving 100 percent of the State agency's income-eligible population. The Department had conceived this provision as a control to prevent State agencies from being penalized under the 95 percent standard for failing to use funds they could not have reasonably been expected to use. Few commentors addressed this provision, but whose did oppose it. Objections were founded on the data proposed for use to implement the provision and on the perception that only Indian State agencies would be affected. This provision is no longer proposed.

The Department is proposing an adjustment in recognition of the special situations faced by Indian State agencies. Subject to the availability of funding, the food grant awarded to each Indian State agency would be the greater of the grant determined under the "targeted inflation" formula, or the previous year's food grant fully adjusted by the anticipated rate of inflation. In this way, Indian State agencies would always be guaranteed an increase at least equal to anticipated inflation.

4. Outlying Areas

The NAWD also recommended that there be an adjustment for the unique food market conditions faced by the Nation's outlying territories and by Indian State agencies located in remote areas. The Department has adopted this recommendation. The growth component of the proposed formula contains a provision whereby the growth shares for Alaska, the Virgin Islands, Guam, Hawaii and any Indian State agencies within their borders would be adjusted upward before being compared with these State agencies' stability food levels. This procedure would recognize the higher food costs associated with these areas.

The adjustment factor for each State agency would be a multiplier derived from the differential between the Thrifty Food Plan (TFP) amount used in that State and the TFP amount used for the contiguous States and the District of Columbia. The multipliers would thus be obtained through the following formula:

\[ \text{Alaska TFP} = \frac{\text{TFP}}{48 \text{ States/DC}} \]

Four different TFP amounts are used by Food Stamp Program operators in different parts of Alaska. Of these four, the "Urban Alaska" TFP would be used in computing the Alaska State Agency's multiplier because most of the local agencies under its jurisdiction are located in urban areas. The TFP selected for Maniilaq is designated "Rural Alaska II" in the Food Stamp Program Regulations; it is currently used in the portion of Alaska that includes the locality served by the Maniilaq WIC Program.

Each outlying State agency's multiplier would be applied to its respective growth share. This would give the State agency a larger growth share relative to its actual stability/ targeting funds than would otherwise have been the case, hence a greater likelihood of qualifying for growth funding.

No TFP adjustment has been included for Puerto Rico. Evidence does not suggest that the food market conditions found in Puerto Rico are comparable to those found in the other outlying territories and States. Indeed, for the last year that a TFP amount for Puerto Rico was published (1981), the Puerto Rico TFP was lower than that for the contiguous States and the District of...
Columbus. Given the age of that data, the Department does not consider it appropriate to apply it, and proposes to exclude Puerto Rico from this adjustment. We are interested in comments on this issue.

5. Availability of Funds.

Public Laws 99-500 and 99-591 inserted of the following provisions into section 17(1) of the CNA:

- "Not more than 1 percent of the amount of funds allocated to a State agency under this section for supplemental foods for a fiscal year may be expended by the State agency for expenses incurred under this section for supplemental foods during the preceding fiscal year; or
- "Not more than 1 percent of the amount of funds allocated to a State agency for a fiscal year under this section may be expended by the State agency during the subsequent fiscal year."

Thus, the new law permits a State agency to either carry funds forward for expenditure in the fiscal year following the one for which the Department had allocated the funds, or to "backspend" funds for costs incurred in the preceding fiscal year. The "carry-forward" provision applies to both food and administrative funds, while the "backspending" provision applies to food funds only. A State agency may elect either provision, but not both, with respect to a single fiscal year. The new law also prohibits the Department from considering funds carried forward from the preceding fiscal year when allocating funds to any State agency for the current fiscal year. Since these provisions are nondiscretionary, they became effective on the date designated in the law (October 1, 1986).

Accordingly, they are being published as final rules in a separate Federal Register publication.

While these nondiscretionary provisions do not address the funding formula itself, they do affect the conditions under which the Department may apply it. Paragraph 246.16(b), as revised by the aforementioned final rule, would contain a generic statement of the "carry-forward" and "backspending" provisions, and would specify that funds carried forward will be presumed to have been the first funds expended in the subsequent fiscal year. Paragraph 246.16(f) (formerly 246.16(d) as amended by the final rule) would exempt funds carried forward into the subsequent fiscal year from recovery and reallocation by FNS. provided the State agency had properly notified FNS of its intent to exercise the "carry-forward" option.

List of Subjects in 7 CFR Part 246
Food assistance programs, Food donations, Grant programs—social programs, Indians, Infants and children, Maternal and child health, Nutrition, Nutrition education, Public assistance programs, WIC, Women.

PART 246—[AMENDED]

Accordingly, it is proposed to amend 7 CFR Part 246 as follows:

1. The authority citation for Part 246 reads as follows:


2. In §246.2, new definitions of "residual funds" and "stability funds" are added in alphabetical order, and the existing definitions of "participants" and "participation" are revised, as follows:

§ 246.2 Definitions.

- "Participants" means pregnant women, breastfeeding women, postpartum women, infants and children who are receiving supplemental foods or food instruments under the Program, and the breastfed infants of participant breastfeeding women.

- "Participation" means the sum of the number of persons who have received supplemental foods or food instruments during the reporting period and the number of infants breastfed by participant breastfeeding women during the reporting period.

- "Residual funds" means funds remaining available for allocation to State agencies after every State agency has received the amount allocable to it as stability funds in accordance with §§246.16(c)(2)(i) and 246.16(c)(3)(i).

- "Stability funds" means funds allocated to any State agency for the purpose of maintaining its preceding year Program operating level, in accordance with §§246.16(c)(2)(i) and 246.16(c)(3)(i).

3. In §246.18, paragraphs (c), (d) and (e) are redesignated as paragraphs (o), (f) and (g), respectively; new paragraphs (c) and (d) are added; and paragraphs (b) introductory text, (b)(2) introductory text, newly designated (f) and newly designated (g) are revised, as follows:

§ 246.18 Distribution of funds.

- (b) Distribution of funds to State agencies. Funds made available to the Department for the Program in any fiscal year shall be distributed as follows:

(2) All funds not made available to the Secretary in accordance with paragraph (b)(1) of this section shall be distributed to State agencies in accordance with the funding formula set forth in paragraph (c) of this section to the extent that funds are available. This formula shall allocate funds to all State agencies for food costs and for administrative and program services costs incurred during the fiscal year in which the funds had been made available to the Department:

Provided, however, that any State agency may exercise either of the following options with respect to funds allocated to it for any fiscal year, commencing with the fiscal year ending September 30, 1987:

- (c) Allocation formula—(1) Use of participation data in the formula.

Wherever the formulas set forth in paragraph (c)(2) of this section require the use of participation data, FNS shall use participation data reported by State agencies according to §248.25(b) of this Part:

Provided, however, that prior to using such participation data in any such formula FNS shall adjust such data as necessary to compute the number of persons in each participant category that are in each nutritional risk priority group:

Provided, further, that FNS shall use data reflecting Participation supported by the aggregate of Federal and State funds for any State agency whose State has budgeted funds from State sources for the Program, if such State agency requests FNS to do so in accordance with a deadline prescribed by FNS.

(2) Allocation for food costs.

Eighty (80) percent of the funds available for allocation to State agencies each fiscal year shall be allocated for food costs according to the following procedure:

(i) Allocation of stability funds. Each State agency shall receive for food costs a base amount of stability funds equal to the sum of all funds allocated to such State agency for all food costs during the preceding fiscal year minus fifty (50) percent of any food funds voluntarily returned by such State agency prior to July 16 of the preceding fiscal year.

Funds expended by any State agency for food costs incurred in the preceding fiscal year in accordance with paragraph (b)(2)(1) of this section, shall not be included in this base amount. Thus base amount shall be adjusted by the cumulative effect of the following operations:
(A) Inflation adjustment. The base amount shall be increased by an inflation factor. The inflation factor shall be obtained by dividing the State agency's imputed participation in Priorities I, II and III by its total participation and multiplying the resulting quotient by the anticipated rate of inflation as determined by FNS. Provided, however, that the sum of the stability funds and residual funds allocated to any Indian State agency for food costs shall not be less than such State agency's base amount increased by the anticipated rate of inflation.

(B) Migrant set-aside. Each State agency's base amount, as adjusted for inflation, shall be further adjusted in order to make funds available for services to eligible members of migrant populations. The national aggregate amount such State agency had been served in the immediately preceding fiscal year. The basis for determining each such State agency's share of these funds shall be its proportionate share of the anticipated population in the immediately preceding fiscal year. The base for its determination shall be its share of the anticipated cost, as determined by FNS, of supplemental foods to be provided to eligible migrants in the applicable fiscal year.

(C) 95 percent performance standard. The amount allocated to any State agency for food costs in any fiscal year shall be reduced if such State agency's food costs for the preceding fiscal year did not equal or exceed 95 percent of the amount such State agency had been authorized to expend for such costs. Such reduction shall equal the difference between the State agency's preceding year food costs and 95 percent of the amount the State agency had been authorized to expend for such costs. A corresponding amount of administrative and program services funds shall also be recovered from the State agency. Temporary waivers of this 95 percent performance standard may be granted at the discretion of FNS.

(ii) Allocation of residual funds. Any funds remaining available for allocation for food costs after the allocation of stability food funds required by paragraph (c)(2)(i) of this section has been completed shall be allocated as follows: provided, however, that the aggregate amount of stability and residual funds allocated to any State agency for food costs in any fiscal year shall not exceed the aggregate amount of stability and residual funds allocated to such State agency for food costs in the preceding fiscal year by more than 15 percent:

(A) Fifty (50) percent of such food funds shall be allocated on the basis of the State agency's imputed participation in Priority I. Of the funds available for allocation on this basis, the percent allocated to each State agency shall be the percent such State agency's imputed Priority I participation is of the national aggregate imputed Priority I participation.

(B) Fifty (50) percent of such food funds shall be allocated on the basis of the sums of the food costs for the preceding fiscal year for reallocation under paragraph (g) of this section shall not be considered in the calculation of the ratio of administrative and program services funds to food funds allocated to the State agency for the preceding fiscal year. FNS will allocate additional stability funds for administrative and program services costs based on the individual needs of each State agency; provided, however, that the aggregate amount of stability funds allocated to all State agencies for administrative and program services costs shall not exceed twenty-five (25) percent of the aggregate amount of stability funds allocated under paragraph (c)(9)(i) of this section.

(ii) Allocation of residual funds. Any funds remaining available for allocation for administrative and program services costs after the stability allocation required by paragraph (c)(3)(i) of this section has been completed shall be allocated as residual funds. The amount of such funds allocated to each State agency shall be determined by applying, to each of the amounts of funds allocated to the State agency as residual food funds under paragraphs (c)(2)(ii)(A) and (c)(2)(ii)(B) of this section, the lesser of (A) twenty-one (21) percent; or (B) the ratio of administrative and program services funds to food funds allocated to the State agency as residual food funds under paragraphs (c)(2)(ii)(A) and (c)(2)(ii)(B) of this section.

(1) The "Urban Alaska" Thrifty Food Plan amount shall be used to determine the adjusting factor for the Alaska State Agency; and

(2) The adjusting factor for any Indian State agency located within the State of Alaska shall be determined from whichever "Rural Alaska" Thrifty Food Plan amount is used in the locality served by such Indian State agency.

(3) Allocation for administrative and program services costs. Twenty (20) percent of the funds available for allocation to States this each fiscal year shall be allocated for administrative and program services costs according to the following procedure:

(I) Allocation of stability funds. Each State agency shall receive an amount of funds equal to the product obtained by applying, to the amount allocated to the State agency as stability food funds under paragraph (c)(2)(i) of this section, the lesser of (A) twenty-one (21) percent; or (B) the ratio of administrative and program services funds to food funds allocated to the State agency for the preceding fiscal year. Funds voluntarily returned by any State agency prior to July 16 of the preceding fiscal year for reallocation under paragraph (g) of this section shall not be considered in the calculation of the ratio of administrative and program services funds to food funds allocated to the State agency for the preceding fiscal year. Funds voluntarily returned by any State agency prior to July 16 of the preceding fiscal year for reallocation under paragraph (g) of this section shall not be considered in the calculation of the ratio of administrative and program services funds to food funds allocated to the State agency for the preceding fiscal year.

(I) Allocation of residual funds. Any funds remaining available for allocation for administrative and program services costs after the stability allocation required by paragraph (c)(3)(i) of this section has been completed shall be allocated as residual funds. The amount of such funds allocated to each State agency shall be determined by applying, to each of the amounts of funds allocated to the State agency as residual food funds under paragraphs (c)(2)(ii)(A) and (c)(2)(ii)(B) of this section, the lesser of (A) twenty-one (21) percent; or (B) the ratio of administrative and program services funds to food funds allocated to the State agency as residual food funds under paragraphs (c)(2)(ii)(A) and (c)(2)(ii)(B) of this section.
amount of residual funds allocated to all State agencies for administrative and program services costs shall not exceed twenty-five (25) percent of the aggregate amount of residual funds allocated for food costs under paragraph (c)(2)(ii) of this section.

(4) Adjustment for new State agencies. Whenever a State agency that had not previously administered the Program enters into an agreement with the Department to do so during a fiscal year, FNS shall make any adjustments to the requirements of this section that are deemed necessary to establish an appropriate initial funding level for such State agency.

(d) Method of payment to State agencies. Each State agency’s funds will be provided by means of a Letter of Credit unless another funding method is specified by FNS. State agencies shall use funds to cover those allowable and specified Credit unless another funding method is determined, based on State agencies.

State agency.

is deemed necessary to establish an
FNS

shall make any adjustments to the requirements of this section that are deemed necessary to establish an appropriate initial funding level for such State agency.

(i) Method of payment to State agencies. Each State agency’s funds will be provided by means of a Letter of Credit unless another funding method is specified by FNS. State agencies shall use funds to cover those allowable and documented Program costs, as defined in 246.14, which are incurred by the State agency and participating local agencies with their jurisdictions.

(ii) Recovery of funds. (1) Funds may be recovered from a State agency at any time FNS determines, based on State agency reports of expenditures and operations, that the State agency is not recovering funds at a rate commensurate with the amount of funds distributed or provided for expenditures under the Program.

(2) FNS shall recover from any State agency that failed to meet the 95 percent performance standard set forth in paragraph (c)(5)(i)(C) of this section the amount of funds by which such State agency’s stability food and administrative and program services funds have been reduced pursuant to that paragraph.

(3) If any State agency notifies FNS of its intent to carry forward a specific amount of funds for expenditure in the subsequent fiscal year, in accordance with paragraph (b)(2)(ii) of this section, such funds shall not be subject to recovery by FNS; Provided, however, that such notification must conform to a deadline prescribed by FNS.

(g) Reallocation of Funds. Any funds recovered under Paragraph (f) of this section will be reallocated by FNS through application of appropriate formulas set forth in paragraph (c) of this section.

Dated: April 14, 1987
S. Anna Kondratas,
Acting Administrator.

[FR Doc. 87-6685 Filed 4-14-87; 3:44 pm]

Agricultural Marketing Service
7 CFR Part 908
[Valencia Orange Regulation 381]

Valencia Oranges Grown In Arizona and Designated Part of California; Minimum Size Limitation

AGENCY: Agricultural Marketing Service, USDA.
ACTION: Proposed rule.

SUMMARY: This rule invites written comments on a proposal to establish a minimum size requirement of 2.32 inches in diameter for fresh domestic shipments of California-Arizona Valencia oranges during the 1986-87 season. The proposed action recognizes the anticipated size composition of the 1986-87 California-Arizona Valencia orange crop and current and prospective market conditions.

DATE: Comments due April 27 1987

ADDRESS: Interested persons are invited to submit written comments concerning this notice. Comments must be sent in triplicate to the Docket Clerk, Fruit and Vegetable Division, AMS, USDA, Room 2065, South Building, Washington, DC 20250. Comments should reference the date and page number of this issue of the Federal Register and will be available for public inspection in the office of the Docket Clerk during regular working hours.

FOR FURTHER INFORMATION CONTACT:
James M. Scanlon, Acting Chef, Marketing Order Administration Branch, F&V AMS, USDA, Washington, DC 20250, telephone: 202/447-5697

SUPPLEMENTARY INFORMATION: This rule has been reviewed under Executive Order 12291 and Departmental Regulation 1512-1 and has been designated a "nonmajor" rule under criteria contained therein.

Pursuant to requirements set forth in the Regulatory Flexibility Act (RFA), the Administrator of the Agricultural Marketing Service (AMS) has considered the economic impact on small entities.

The purpose of the RFA is to fit regulatory actions to the scale of business subject to such actions in order that small businesses will not be unduly or disproportionately burdened.

Markets grower agreement pursuant to the Agricultural Marketing Agreement Act of 1937 as amended, hereinafter referred to as the "Act" and rules issued thereunder are unique in that they are brought about through group action of essentially small entities acting on their own behalf. Thus, both statutes have small entity orientation and compatibility.

Valencia oranges regulated under Marketing Order No. 908 are grown in Arizona and designated parts of California. For marketing order purposes, the production area is divided into three districts: District 1, representing Central California; District 2, representing Southern California; and District 3, representing Arizona and the southeastern desert area of California.

In recent seasons, District 1 has accounted for around 40 percent of total production, District 2 over 50 percent, and District 3 around 7 percent. The Valencia Orange Administrative Committee's (VOAC) crop estimate of 59,000 cars is expected to be allocated among the districts in relative amounts close to these approximated percentages.

The three basic outlets for California-Arizona Valencias are domestic fresh, export, and processing markets. The domestic fresh market is fairly static and is the preferred market for Valencia oranges, receiving around 23,000 cars per year unless unusual conditions such as poor quality and/or abnormal crop sizes exist. Quantities utilized in the export market have ranged from 9,208 cars to over 13,000 cars in the past five years. Exports ranged from 9,208 cars to over 13,000 cars in the past five years. Exports vary depending on factors such as the foreign monetary exchange rate, quality, orange sizes, and trade practices. The processing market is basically a residual outlet. Valencia oranges not sold fresh are either disposed of or utilized for products, such as orange juice. Estimated crop utilization for the 1986-87 season is 22,000 cars (37 percent) for domestic fresh markets, 12,000 cars (20 percent) for export, with the remaining 25,000 (42 percent) going to processed and other outlets. Such estimates are based on the anticipated supply of Valencia oranges available for market during the 1986-87 season, and the demand in such outlets for Valencia oranges.

There are an estimated 115 handlers and 3,500 growers of California-Arizona Valencia oranges. The Small Business Administration (SBA) has defined small agricultural growers as those growers having annual gross revenues for the past three years of $100,000 or less, and small handlers as those with gross revenues of $3.5 million or less. Aggregate industry data indicate grower revenue has averaged about $45,000 over the past three years, and handler revenue has averaged about $1.7 million. The majority of growers and handlers of
California-Arizona Valencia oranges may be classified as small entities.

The proposed minimum size regulation is issued under Marketing Order No. 908, as amended (7 CFR Part 908), regulating the handling of Valencia oranges grown in Arizona and designated parts of California. The order is effective under the Act (7 U.S.C. 601–674). This action is based upon the recommendation and information submitted by the VOAC and on other available information.

The VOAC met publicly on March 10, 1987 and recommended the establishment of a minimum size regulation for the 1986–87 season. The proposal is consistent with the marketing policy for 1986–87. The proposed action would provide the domestic shipment of small sized California-Arizona Valencia oranges during the 1986–87 season.

Valencia oranges are classified into categories which indicate the number of oranges packed into a standard carton of 37.5 pounds. For instance, a size category designating very large size oranges would be 56's and very small sizes, 180's or 210's. The proposed regulation would prohibit the shipment of size 180's and smaller. It is difficult to ascertain the exact amount of oranges that would preclude from shipment to the domestic fresh market because oranges tend to get larger as the season progresses, if left on the tree. Another factor complicating the exact estimation of the quantity of small sized Valencia oranges is that the 1986–87 production is expected to be high, and there is generally a larger proportion of small fruit in larger crops.

The VOAC reports that growth tests indicate that the Valencia oranges have not been sizing as rapidly as normal, thus making it more difficult to predict actual outturn. The sizes precluded from shipment (180's and smaller) are estimated to represent approximately 18 to 30 percent of the crop. Although the percentage of Valencia oranges estimated to be precluded for use in domestic fresh markets because of this proposed regulation appears to be high, the percentage of the crop expected to go to outlets other than domestic fresh is expected to total 63 percent. A good portion of such percentage traditionally includes small sized oranges. Thus, ample markets exist for the small sized oranges.

Implementation of this regulation would result in the handling of the larger sized oranges, improving grower returns and aiding in strengthening the price patterns of the larger sizes. Prices for smaller sized oranges are usually discounted which may tend to reduce the overall price structure for all Valencia oranges. However, prices tend to peak on sizes 72's and 86's, with markedly lower prices on smaller sizes; with prices for size 183's usually less than one-half the level of the more preferred sizes. This regulation applies only to domestic shipments including Canada. Smaller sized Valencia oranges may be processed, exported and otherwise shipped in accordance with § 908.67 As not all of the crop will be utilized in domestic fresh markets, the result of the regulation would be to move toward an economic utilization which is expected to result in higher overall grower revenue.

Consequently, when weighing costs and benefits derived from the use of size regulations, it seems highly probable that the benefits of this rule would far outweigh the costs.

Based on the above, the Administrator of the Agricultural Marketing Service has determined that the issuance of this size regulation would not have a significant economic impact on a substantial number of small entities.

Interested persons are invited to submit their views and comments on this proposal. A 10-day comment period is considered adequate because a final rule, if issued, should be issued as soon as possible since shipments of 1986–87 crop Valencia oranges have already begun and are expected to continue through October 1987.

List of Subjects in 7 CFR Part 908
Marketing agreements and orders, California, Arizona, Oranges, Valencia.

For the reasons set forth in the preamble, 7 CFR Part 908 is proposed to be amended as follows:

PART 908—VALENCIA ORANGES GROWN IN ARIZONA AND DESIGNATED PARTS OF CALIFORNIA

Subpart—Rules and Regulations


2. Section 908.681 is added to read as follows: Note.—The following section will not be published in the Code of Federal Regulations. § 908.681 Valencia Orange Regulation 381.

During the period (effective date to be established) through October 31, 1987, no handler shall handle any Valencia oranges which are of a size smaller than 2.32 inches in diameter, such diameter to be the largest measurement at a right angle to a straight line running from the stem to the blossom end of the fruit: Provided, That not to exceed 5 percent, by count, of the oranges in any container may measure smaller than 2.32 inches in diameter.

Ronald L. Cioffi,
Acting Deputy Director, Fruit and Vegetable Division.
[FR Doc. 87–8533 Filed 4–16–87 8:45 am]
BILLING CODE 3410–02–M

7 CFR Part 910
Lemons Grown In California and Arizona Amendment of Rules and Regulations

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Proposed rule.

SUMMARY: This proposed rule would amend rules and regulations established under the marketing order covering California-Arizona lemons to increase, from 250 to 350 cartons per week, the amount of organic lemon handlers may ship without regard to volume and size regulations under the order. The proposed amendment recognizes additional opportunity to market organic lemons to organic health food wholesalers and retailers.


ADDRESS: Interested persons are invited to submit written comments concerning this notice. Comments must be sent in triplicate to the Docket Clerk, Fruit and Vegetable Division, AMS, USDA, Room 2085, South Building, Washington, DC 20250. Comments should reference the date and page number of this issue of the Federal Register and will be available for public inspection in the office of the Docket Clerk during regular working hours.


SUPPLEMENTARY INFORMATION: This final rule has been reviewed under Executive Order 12291 and Departmental Regulation 1512–1 and has been determined to be a non-major rule under criteria contained therein. Pursuant to requirements set forth in the Regulatory Flexibility Act (RFA), the Administrator of the Agricultural Marketing Service has considered the economic impact on small entities.

The purpose of the RFA is to fit regulatory actions to the scale of business subject to such actions in order
that small businesses will not be unduly
or disproportionately burdened.
Marketing orders issued pursuant to the
Agricultural Marketing Agreement Act,
and rules issued thereunder, are unique
in that they are brought about through
group action of essentially small entities
acting on their own behalf. Thus, both
statutes have small entity orientation
and compatibility.
It is estimated that approximately 85
handlers of California-Arizona lemons
under the marketing order for lemons
grown in California and Arizona will be
subject to regulation during the course
of the current season and that the great
majority of these firms may be classified
as small entities. However, this rule
would not have a significant effect on
the vast majority of handlers subject to
regulation because there are only 2
handlers who currently ship organic
lemons.

Organic or health food wholesalers and
retailers.

Dated: April 10, 1987
Ronald L. Cofiff,
Acting Deputy Director, Fruit and Vegetable
Division, Agricultural Marketing Service.
[FR Doc. 87-8652 Filed 4-19-87; 8:45 am]
BILLING CODE 3410-02-M

7 CFR Part 1040
Milk in the Southern Michigan
Marketing Area; Proposed Suspension
of Rules
AGENCY: Agricultural Marketing Service,
USDA.
ACTION: Proposed suspension of rules.

SUMMARY: This notice invites written
comments on a proposal to suspend for
the months of April through August 1987
the requirement in the Southern
Michigan Federal milk order that a
cooperative association deliver to pool
distributing plants at least 50 percent of
its members' producer milk in order to
qualify its supply plants as pool plants
under the order. The suspension was
requested by a cooperative association
that represents producers supplying milk
to the fluid market. The association
claims that the action is needed to avoid
inefficient handling of milk and to
ensure that dairy farmers historically
associated with the Southern Michigan
market will continue to share in the
market's fluid milk sales.

DATE: Comments are due no later than
April 24, 1987
ADDRESS: Comments (two copies)
should be filed with the Dairy Division,
Agricultural Marketing Service, Room
2968, South Building, U.S. Department of
Agriculture, Washington, DC 20250.

FOR FURTHER INFORMATION CONTACT:
Richard A. Glandt, Marketing Specialist,
Dairy Division, Agricultural Marketing
Service, U.S. Department of Agriculture,
Washington, DC 20250, (202) 447-4829.

SUPPLEMENTARY INFORMATION: The
Regulatory Flexibility Act (5 U.S.C. 601-
612) requires the Agency to examine the
impact of a proposed rule on small
entities. Pursuant to 5 U.S.C. 605(b) the
Administrator of the Agricultural
Marketing Service has certified that this
proposed action would not have a
significant economic impact on a
substantial number of small entities.
Such action would lessen the regulatory
impact on certain milk handlers and
would tend to ensure that dairy farmers
would continue to have their milk priced
under the order and thereby receive the benefits that accrue from such pricing.

Notice is hereby given that, pursuant to the provisions of the Agricultural Marketing Agreement Act of 1937 as amended (7 U.S.C. 601 et seq.), the suspension of the following provisions of the order regulating the handling of milk in the Southern Michigan marketing area is being considered for April through August 1987:

1. In § 1040.7(b)(2) the words "if transfers from such supply plant to plants described in paragraph (b)(5) of this section and by direct delivery from the farm to plants qualified under paragraph (a) of this section are:"

2. In § 1040.7(b)(2), paragraphs (i) and (ii).

All persons who want to send written data, views or arguments about the proposed suspension should send two copies to the Dairy Division, Agricultural Marketing Service, Room 2068, South Building, U.S. Department of Agriculture, Washington, DC 20250, by the 7th day after publication of this notice in the Federal Register. The period for filing comments is limited to seven days because a longer period would not provide the time needed to complete the required procedures and include April 1987 in the suspension period if this is found necessary.

The comments that are received will be made available for public inspection in the Dairy Division during normal business hours (7 CFR 1.27(b)).

Statement of Consideration

The proposed suspension would make inoperative for the months of April through August 1987 the provisions requiring a cooperative association to deliver at least 50 percent of its members' producer milk to pool distributing plants either through its supply plants or directly from farms, in order to qualify its supply plants as pool plants.

Michigan Milk Producers Association (MMPA), which represents a substantial number of the producers supplying the market, requested the suspension. The association stated that without the suspension their organization would be unable to pool approximately 50 million pounds of member milk during the period of May through July 1987. They noted that this analysis is based upon a projection that only about 48 percent of their members' production, which is pooled as part of a supply plant unit, would be needed to satisfy the requirements of the distributing plants that they supply. For March 1987 at MMPA's request, the Department suspended the pooling provision that required a supply plant operator to ship at least 30 percent of its receipts of Grade A milk to distributing plants. At that time, they indicated that their fluid milk sales had declined dramatically in February and no improvement was expected in March. MMPA found it was necessary to divert milk supplies routinely associated with the fluid market to manufacturing plants in order to accommodate milk shipments from a proprietary handler supply plant unit.

MMPA noted that a hearing was recently held on proposals, including one by MMPA, to amend the Southern Michigan order. They stated that their proposal, if adopted, would make it easier for their organization to pool the milk of their members and alleviate the need to suspend these provisions in the future. Without the suspension for this period, the association said that it would be required to make some inefficient milk movements in order for the milk of dairy farmers associated with the market to share in the fluid milk sales of the market.

Accordingly, it may be appropriate to suspend the aforesaid provisions for the period of April through August 1987.

List of Subjects in 7 CFR Part 1040
Milking units, Milk, Dairy products.

The authority citation for 7 CFR Part 1040 continues to read as follows:
J. Patrick Boyle, Administrator.

BILLING CODE 3410-02-M

7 CFR Part 1106
Milk in the Southwest Plains Marketing Area; Proposed Suspension of a Certain Provision

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Proposed suspension of a rule.

SUMMARY: This notice invites written comments on a proposal to suspend a portion of the "producer" definition of the Southwest Plains order for the months of April-July 1987. The provision proposed to be suspended prevents dairy farmers from being producers under the order during spring and summer months if they have not sufficiently supplied the market during the previous fall months when fluid milk needs are seasonally greater. The suspension was requested by Mid-America Dairymen, Inc. (Mid-Am), a cooperative association that represents a substantial number of producers who supply the Southwest Plains market.

Mid-Am contends that the action is necessary to permit the efficient use of advantageously located supplies of milk to supply the fluid milk needs of the market.

DATE: Comments are due on or before April 24, 1987.

ADDRESS: Comments (two copies) should be filed with the Dairy Division, Agricultural Marketing Service, Room 2068, South Building, U.S. Department of Agriculture, Washington, DC 20250.


SUPPLEMENTARY INFORMATION: The Regulatory Flexibility Act (5 U.S.C. 601-612) requires the Agency to examine the impact of a proposed rule on small entities. Pursuant to 5 U.S.C. 605(b), the Administrator of the Agricultural Marketing Service has certified that this proposed action would not have a significant economic impact on a substantial number of small entities. Such action would lessen the regulatory impact of the order on certain milk handlers by promoting hauling efficiencies and would tend to ensure that dairy farmers who supply fluid milk needs would have their milk priced under the order and thereby receive the benefits that accrue from such pricing.

Notice is hereby given that, pursuant to the provisions of the Agricultural Marketing Agreement Act of 1937 as amended (7 U.S.C. 601-674), the suspension of the following provision of the order regulating the handling of milk in the Southwest Plains marketing area is considered for the months of April-July 1987:

In § 1106.12, paragraph (b)(5) in its entirety.

All persons who want to send written data, views or arguments about the proposed suspension should send two copies of them to the Dairy Division, Agricultural Marketing Service, Room 2068, South Building, U.S. Department of Agriculture, Washington, DC 20250, by the 7th day after publication of this notice in the Federal Register. The period for filing comments is limited to 7 days because a longer period would not provide the time needed to complete the required procedures and include April in the suspension period.

The comments that are sent will be made available for public inspection in the Dairy Division during normal business hours (7 CFR 1.27(b)).
Summary: The Farmers Home Administration proposes to amend its community facility loan regulations. This action is in response to FmHA staff requests for clarification of the regulations for loans for community facilities and community domestic water and waste disposal systems. It will also bring the regulations into compliance with certain provisions of the Food Security Act of 1985 and the Single Audit Act of 1984.

DATE: Comments must be received by May 18, 1987.

ADDRESSES: Submit written comments in duplicate to the Chief, Directives Management Branch, Farmers Home Administration, USDA, South Agriculture Building, Room 6348, 14th and Independence Avenue SW., Washington, DC 20250. All written comments made pursuant to this notice will be available for public inspection during regular work hours at the above address. The collection of information requirements contained in this rule have been submitted to OMB for review under section 350(h) of the Paperwork Reduction Act of 1980. Submit comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, Attention: Desk Officer for the Farmers Home Administration, Washington, DC 20503.

FOR FURTHER INFORMATION CONTACT: Wayne Stanberry, Loan Specialist, Community Facilities Division, Farmers Home Administration, USDA, South Agriculture Building, 14th and Independence Avenue SW., Room 6308, Washington, DC 20250, Telephone 202-382-1490.

SUPPLEMENTARY INFORMATION:

Classification

This proposed action has been reviewed under USDA procedures established in Departmental Regulation 1512-1, which implements executive order 12291, and has been determined to be "non-major." The proposed action is not likely to result in any of the following: (a) An annual effect on the economy of $100 million or more, (b) a major increase in costs or prices for consumers, individual industries, Federal, State or local government agencies, or geographic regions, or (c) significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of United States-based enterprises to compete with foreign-based enterprises in domestic or export markets.

Intergovernmental Review

These programs are listed in the Catalog of Federal Domestic Assistance under numbers 10.423, Community Facilities Loans, and 10.418, Water and Waste Disposal Systems for Rural Communities, and are subject to the provisions of Executive Order 12272, which requires intergovernmental consultation with State and local officials. (7 CFR Part 3015, Subpart V; 48 FR 29112, June 24, 1983; 49 FR 22875, May 31, 1984; 50 FR 14088, April 10, 1985.)

Environmental Impact

This document has been reviewed in accordance with 7 CFR Part 190, Subpart G, "Environmental Programs." FmHA has determined that this action does not constitute a major Federal action significantly affecting the quality of the human environment and in accordance with the National Environmental Policy Act of 1969, Pub. L. 91-190, an Environmental Impact Statement is not required.

Background

This package is an accumulation of numerous regulation changes suggested by various staff members over a period of several months along with changes needed to comply with the Single Audit
Act of 1984, OMB Circular A-128, and the Food Security Act of 1985. FmHA believes the proposed changes will clarify the regulations and help FmHA to serve the public more efficiently while protecting the Government's interest.

The primary changes proposed include the following:

1. A requirement is added that notices of adverse action on preapplications or applications will include a statement regarding the Federal Equal Credit Opportunity Act.

2. The requirements for preparing letters of conditions are clarified. Scheduling of payments, compliance with section 504 of the Rehabilitation Act, and reserve requirements are added to the list of items to be covered in letters of conditions.

3. A provision is added to clarify the authority of the FmHA District Office to request information from applicants as needed to determine eligibility.

4. Under certain conditions, application dockets must be reviewed in the National Office. The list of items that must be included in the docket for National Office review is amended to clarify the type of financial information required.

5. A provision is added under which funds obligated for a particular applicant may be transferred to another applicant if the new applicant meets eligibility requirements, the two applicants have a close and genuine relationship and the need for a scope of the project does not change.

6. A requirement for National Office review of negotiated procurement contracts over $100,000 is removed.

7. A provision is added to allow noncompetitive negotiation for procurement actions not exceeding $50,000.

8. Regulations prohibit choosing boundaries for the service area of an FmHA financed utility-type facility to exclude certain people. The list of people who may not be excluded is expanded to include the handicapped.

9. The eligibility criteria for the poverty line interest rate is amended to remove the reference to enforcement and recognize standards of agencies with jurisdiction to establish standards.

10. The time limit for defending collection of principal is clarified to be 36 months following the date the first interest installment is due.

11. Security requirements are amended to provide that a lien may be taken on an applicant's interest in a water sales contract.

12. A provision is added to clarify that if there are conflicts between this subpart and State or local laws this subpart will control. A requirement that borrowers procurement regulations comply with State and local laws is removed.

13. The regulations regarding supervised bank accounts are amended to clarify that supervised bank accounts may, under certain circumstances, be used for funds advanced by other lenders or agencies.

14. The regulations regarding review and acceptance of partial payment estimates are amended to provide for partial payment estimates prepared by the contractor rather than the project architect/engineer.

15. A provision is added that borrowers planning to sell water to other bulk users must have written contracts for such service.

16. A provision is added that management agreements or leases must not contain agreement for transfer of ownership.

17. The section on priorities is revised to adjust the criteria for awarding priority points based on income to correspond to the thresholds for different interest rates.

18. A paragraph is removed which has caused confusion regarding requirements for loan repayment schedules. In all cases payments to FmHA should approximate amortized installments.

19. A provision is added that FmHA will fully consider any recommendations of the owner concerning technical design and choice of materials.

20. The paragraphs on audits of borrower operations are revised to comply with the Single Audit Act of 1984, Pub. L. 98-502, and OMB Circular A-128, "Audits of State and Local Governments." The Single Audit establishments audit requirements for State and local governments that receive Federal assistance and defines Federal responsibilities for implementing and monitoring those requirements. Section 7505 of the Act required OMB to issue implementing guidelines, which were issued as OMB Circular A-128. Further, the Circular directed Federal agencies to publish regulations implemented it.

FmHA expects to include additional changes to 7 CFR Part 1942--A in the final rule. These additional proposed changes are not included for publication in the proposed rule because they are items of internal management not directly impacting the public.

List of Subjects in CFR Part 1942

Community development, Community Facilities, Loan programs-Housing and community development, Loan security, Rural areas, Waste treatment and disposal-Domestic, Water supply-Domestic.

Accordingly, FmHA proposes to amend Subpart A of Part 1942, Chapter IV, Title 7 Code of Federal Regulations, as follows:

PART 1942—ASSOCIATIONS


Subpart A—Community Facility Loans

2. Section 1942.2 is amended by adding a new paragraph (a)(1)(v) and revising paragraph (d) to read as follows:

§ 1942.2 Processing applications.

(a) * * *

(1) * * *

(v) Supporting documentation necessary to make an eligibility determination such as financial statements, audits, or copies of organizational documents or existing debt instruments. The District Director will advise applicants on what documents are necessary. Applicants should not be required to expend significant amounts of money or time developing supporting documentation at the preapplication stage.

* * * * *

(d) Review of decision. If at any time prior to loan approval it is decided that favorable action will not be taken on a preapplication or application, the District Director will notify the applicant in writing of the reasons why the request was not favorably considered. The notification to the applicant will state that a review of this decision by FmHA may be requested by the applicant under Subpart B of Part 1900 of this chapter. The following statement will also be made on all notifications of adverse action.

The Federal Equal Credit Opportunity Act prohibits creditors from discriminating against credit applicants on the basis of race, color, religion, national origin, sex, marital status, age (provided that the applicant has the capacity to enter into a binding contract); because all or part of the applicant's income is derived from any public assistance program; or because the applicant has in good faith exercised any right under the Consumer Credit Protection Act. The Federal agency that administers compliance with this law is the Federal Trade Commission, Equal Credit Opportunity, Washington, DC 20580.

3. Section 1942.5 is amended by revising paragraph (a)(1)(i), (b)(1)(iii)(F) and (b)(1)(iii)(G), removing paragraph
Field Office terminal system. An obligation of funds established for an applicant may be transferred to a different (substituted) applicant provided:

(i) The substituted applicant is eligible to receive the assistance approved for the original applicant; and

(ii) The substituted applicant bears a close and genuine relationship to the original applicant (such as two organizations that are controlled by the same individuals); and

(iii) The need for the scope of the project and the purpose(s) for which FmHA funds will be used remain substantially unchanged.

4. Section 1942.9 is amended by revising the introductory text of paragraph (b) to read as follows:

§ 1942.9 Planning, bidding, contracting, and constructing.

(a) * * * (B) Contract approval. The State Director or designee is responsible for approving all construction contracts using legal advice and guidance of OGC as necessary. The use of a contracting method under § 1942.16(1) of this subpart exceeding $100,000 must be concurred in by the National Office. Procurement under § 1942.16(1) of this subpart will not be considered when an FmHA grant is involved. When an applicant requested such concurrence, the State Director will submit the following to the National Office:

(b) * * * * (ii) * * * 

(F) Form FmHA 442-3, “Balance Sheet” or a financial or audit that includes a balance sheet.

(G) For other essential community facility loan applicants whose proposals do not meet the assured income or tax base security requirements of § 1942.17(g)(2)(iii) and (g)(3)(i) of this subpart, financial information for the last five years of operation will be submitted if available. The type of financial information to be submitted should be determined based on what is available and the following order of preference:

(1) Complete audits;

(2) Unaudited financial statements including balance sheets and statements of income and expenses;

(3) Lists of income and expenses.

(d) If a transfer of obligation of funds is necessary, complete Form FmHA 450-10, “Advice of Borrower’s Change of Address, Name, Case Number, or Loan Number,” and process via the FmHA the facility, and providing for its continued availability and use at reasonable rates and terms. This responsibility shall be exercised by the applicant even though the facility may be operated, maintained, or managed by a third party under contract, management agreement, or written lease. Leases may be used when this is the only feasible way to provide the service and is the customary practice. Management agreements should provide for at least those items listed in Guide 24 of this subpart. Such contracts, management agreements, or leases must not contain options or other provisions for transfer of ownership.

5. Section 1942.17 is amended by revising the introductory text of paragraph (b) to read as follows:

§ 1942.17 Community Facilities.

(a) * * * (b) * * *

(3) Legal authority and responsibility. Each applicant must have or will obtain the legal authority necessary for constructing, operating, and maintaining the proposed facility or service and for obtaining, giving security for, and repaying the proposed loan. The applicant shall be responsible for operating, maintaining, and managing
If for any reason it appears necessary to permit a longer period of deferment, the State Director may authorize such deferment with the prior approval of the National Office. Deferments of principal will not be used to:

- * * *
- (g) *
- (2) *
- (i) *

(C) Pledges of facility revenue and, when it is the customary financial practice in the State, liens will be taken on the interest of the applicant in all land, easements, rights-of-way, water rights, water purchase contracts, water sales contracts, sewage treatment contracts, and similar property rights, including leasehold interest, used or to be used in connection with the facility whether owned at the time the loan is approved or acquired with loan funds; and/or

- * * *
- (3) *

(B) A lien will be taken on the interest of the applicant in all land, easements, rights-of-way, water rights, water purchase contracts, water sales contracts, sewage treatment contracts and similar property rights, including leasehold interest, used, or to be used in connection with the facility whether owned at the time the loan is approved or acquired with loan funds. In unusual circumstances where it is not feasible to obtain a lien on such land (such as land rights obtained from Federal or local government agencies, and from railroads) and the loan approval official determines that the interest of FmHA otherwise is secured adequately, the lien requirement may be omitted as to such land rights.

- * * *

(3) Insurance and bonding. Needed insurance coverage and fidelity bonds will be obtained by the time of loan closing or start of construction, whichever occurs first. Ordinarily, FmHA should be listed as mortgagee on the property insurance when FmHA has a lien on the property. Insurance policies are not required to be filed in the case file. Insurance requirements will not normally be over and above those proposed by the borrower provided coverage is found to be adequate, and in accordance with the following:

- * * *

(k) *

(1) Compliance with special laws and regulations. Except as provided in paragraph (k)(2) of this section applicants will be required to comply with Federal, State, and local laws and any regulatory commission rules and regulations pertaining to:

- * * *

(2) Compliance exceptions. If there are conflicts between this subpart and state or local laws or regulatory commission regulations, the provisions of this subpart will control.

- * * *

(p) *

(3) *

(i) Supervised bank account. FmHA loan funds and any funds furnished by the applicant/borrower to supplement the loan including contributions to purchase major items of equipment, machinery, and furnishings may be deposited in a supervised bank account if determined necessary as provided in Subpart A of Part 1902 of this chapter. When FmHA has a Memorandum of Understanding with another agency that provides for the use of supervised bank accounts, or when FmHA is the primary source of funds for a project and has determined that the use of a supervised bank account is necessary, project funds from other sources may also be deposited in the supervised bank account. FmHA shall not be accountable to the source of the other funds nor shall FmHA undertake responsibility to administer the funding program of the other entity. Supervised bank accounts should not be used for funds advanced by an interim lender.

- * * *

(4) Development inspections. The District Director or will be responsible for monitoring the construction of all projects being financed, wholly or in part, with FmHA funds. Technical assistance will be provided by the State Director's staff. Project monitoring will include construction inspections and a review of each project inspection report, each change order and each partial payment estimate and other invoices, such as payment for engineering/architectural and legal fees and other materials determined necessary to effectively monitor each project. These activities will not be performed on behalf of the applicant/borrower, but are solely for the benefit of FmHA and in no way are intended to relieve the applicant/borrower of corresponding obligations to conduct similar monitoring and inspection activities. Project monitoring will include periodic inspections to review partial payment estimates prior to their approval and to review project development in accordance with plans and specifications. Each inspection will be recorded using Form FmHA 424–12, "Inspection Report." The original Form FmHA 424–12 will be filed in the project case folder and a copy furnished to the State Director. The State Director will review inspection reports and will determine that the project is being effectively monitored. The District Director is authorized to review and accept partial payment estimates prepared by the contractor and approved by the borrower, provided the consulting engineer or architect, if one is being utilized for the project, has approved the estimate and certified that all material purchased or work performed is in accordance with the plans and specifications, or if a consulting engineer or architect is not being utilized, the District Director has determined that the funds requested are for authorized purposes. If there is any indication that construction is not being completed in accordance with the plans and specifications or that any other problems exist, the District Director should notify the State Director immediately and withhold all payments on the contract.

- * * *

(3) Substitute for management reports. When FmHA loans are secured by the general obligation of the public body or tax assessments which total 100 percent of the debt service requirements, the State Director may authorize an annual audit to substitute for other management reports if the audit is received within 90 days following the period covered by the audit.

(4) Audits—(i) Audits based upon Federal financial assistance received in a year. The following requirements shall apply to audits of the years in which funds are delivered to the borrower. For years in which the amount of total funds received does not require an OMB Circular A–128 audit, see paragraph (q)(4)(ii) of this section.

(A) Local governments and Indian tribes. These organizations are to be audited in accordance with this subpart and Office of Management and Budget (OMB) Circular A–128, with copies of the audits being forwarded by the borrower to the FmHA District Director and the appropriate Federal cognizant agency. The Circular is attached as
Appendix A (available in any FmHA Office).

(1) Definitions. (i) "Cognizant agency" means the Federal agency assigned by OMB to carry out the responsibilities described in OMB Circular A-128. Within the Department of Agriculture (USDA), OIG is designated as the cognizant agency and they may delegate cognizant agency responsibilities to FmHA if FmHA has provided the major portion of funding.

(ii) Other definitions are contained in Exhibit A (available in any FmHA Office).

(2) Audit requirements. It is not intended that audits required by this subpart be separate and apart from audits performed in accordance with State and local laws. To the extent feasible, the audit work should be done in conjunction with those audits.

(i) Local governments and Indian tribes that receive $100,000 or more a year in Federal financial assistance shall have an audit for that year in accordance with OMB Circular A-128.

(ii) Local governments and Indian tribes that receive between $25,000 and $100,000 a year in Federal financial assistance shall have an audit made for that year in accordance with OMB Circular A-128 or in accordance with FmHA audit requirements. This is an option of the local government or Indian tribe. If the election is made to have an audit performed in accordance with FmHA requirements, the audit shall be in accordance with paragraph (q)(4)(i)(B) of this section.

(iii) Local governments and Indian tribes that receive less than $25,000 a year in Federal financial assistance shall be exempt from both OMB Circular A-128 audits and FmHA audit requirements. However, audits performed shall be governed by the requirements prescribed by State or local law or regulation. Also, refer to paragraph (q)(4)(ii) of this section.

(iv) Public hospitals and public colleges and universities may be excluded from these audit requirements. However, in this case audits shall be made in accordance with paragraph (q)(4)(i)(B) of this section.

(3) Cognizant agency responsibilities. Smaller governments not assigned a cognizant agency should contact the Federal Agency that provided the most funds. When USDA is designated as the cognizant agency by OMB, or when it has been determined by the borrower that FmHA provided the major portion of Federal financial assistance, the appropriate USDA OIG Regional Inspector General shall be responsible for audit related matters. FmHA and the borrower shall coordinate all proposed audit plans with the appropriate USDA OIG. A list of appropriate OIG contact persons is attached to FmHA Instruction 1942-A as Exhibit B (available in any FmHA Office).

(B) Nonprofit organizations and others. These organizations are to be audited in accordance with FmHA requirements and OMB Circular A-110, "Uniform Requirements For Grants to Universities, Hospitals, and Other Nonprofit Organizations." Audits are also to be made in accordance with "Standards for Audits of Government Organizations, Programs, Activities and Functions" issued by the Comptroller General of the United States in 1981 (GAO Standards), and any subsequent revisions. These requirements also apply to public hospitals and public colleges and universities if they are excluded from the audits of paragraph (q)(4)(i)(A) of this section.

(i) Audits shall be supplied to the FmHA District Director as soon as possible but in no case later than ninety (90) days following the period covered by the audit.

(ii) Audit requirements are as follows:

(i) Organizations which receive $25,000 or more a year in Federal financial assistance shall have an organization wide audit for that year. Also refer to paragraph (q)(4)(ii)(A) of this section.

(ii) Organizations which receive less than $25,000 a year in Federal financial assistance shall be exempt from audits for that year, except for the audits based upon annual gross income which may apply in paragraph (q)(4)(ii)(A) of this section.

(iii) Audits based upon annual gross income. The following annual gross income audit requirements shall apply to all borrowers (local government, Indian tribes, and nonprofit organizations) for all years except the ones in which there is an audit requirement based upon the amount of Federal assistance received as required by paragraphs (q)(4)(i)(A)(2) and (q)(4)(ii)(B)(2) of this section.

Audits shall be on an annual basis unless otherwise prohibited and shall be supplied to FmHA as soon as possible but in no case later than 90 days following the period covered by the audit.

(A) Cross annual income of $100,000 or more. (1) Local governments

Indian tribes shall have audits made in accordance with State or local law or regulation or regulatory agency requirements.

(2) All other organizations shall have audits in accordance OMB Circular A-110 and paragraph (q)(4)(i)(B)(2)(i) of this section.

(B) Cross annual income of less than $100,000. For borrowers that have a gross annual income of less than $100,000, the requirements for audits shall be at the discretion of the State Director. However, when audits are required, they shall be in accordance with paragraph (q)(4)(ii)(A) of this section.

(5) Borrowers exempt from audits. All borrowers who are exempt from audits, will, within 60 days following the end of each fiscal year, furnish the FmHA with annual financial statements, consisting of a verification of the organization's balance sheet and statement of income and expense by an appropriate official of the organization. Forms FmHA 442-2 and 442-3 may be used. For borrowers using Form FmHA 442-2, the dual purpose of fourth quarter management reports, when required, and annual statements of income will be met with this one submission.

6. Section 1942.18 is amended by revising paragraphs (g), (j) introductory text (j)(2), and (k)(4) to read as follows:

§ 1942.18 Community Facilities-Planning, Bidding, Contracting, Constructing.

(g) Sewage treatment and bulk water sales contracts. Owners entering into agreements with private or public parties to treat sewage or supply bulk water shall have written contracts for such service and all shall be subject to FmHA concurrence. Paragraph (f) of this section should be used as a guide to prepare such contracts.

(j) Owner's procurement regulations. Owner's procurement regulations must comply with the following standards:

(1) * * *

(2) Maximum open and free competition. All procurement transactions, regardless of whether by sealed bids or by negotiation and without regard to dollar value, shall be conducted in a manner that provides maximum open and free competition. Procurement procedures shall not restrict or eliminate competition.

Examples of what are considered to be restrictive of competition include, but are not limited to placing unreasonable requirements on firms in order for them to qualify to do business: noncompetitive practices between firms; organizational conflicts of interest; and unnecessary experience and bonding requirements. In specifying material(s), the owner and a consultant will consider all materials normally suitable for the project commensurate with
sound engineering practices and project requirements. For a water or waste disposal facility, FmHA shall consider fully any recommendation made by the loan applicant or borrower concerning the technical design and choice of materials to be used for such a facility. If FmHA determines that a design or material, other than those that were recommended should be considered by including them in the procurement process as an acceptable design or material in the water or waste disposal facility, FmHA shall provide such applicant or borrower with a comprehensive justification for such a determination.

* * *

(k) Noncompetitive negotiation. Noncompetitive negotiation is procurement through solicitation of a proposal from only one source, or after solicitation of a number of sources competition is determined inadequate. Noncompetitive negotiation may be used when the award of a contract is not feasible under small purchase, competitive sealed bids (formal advertising) or competitive negotiation procedures. Circumstances under which a contract may be awarded by noncompetitive negotiations are limited to the following:

(i) The item is available only from a single source.
(ii) There exists a public exigency or emergency and the urgency for the requirement will not permit a delay incident to competitive solicitation; or
(iii) After solicitation of a number of sources, competition is determined inadequate; or
(iv) No acceptable bids have been received after formal advertising; or
(v) The procurement of architectural/engineering and other professional services; or
(vi) The aggregate amount does not exceed $50,000.

Section 1942.19 is amended by revising paragraph (h)(2) to read as follows:

§ 1942.19 Information Pertaining to Preparation of Notes or Bonds and Bond Transcript Documents for Public Body Applicants.

* * *

(2) Bond registration. Bonds will contain provisions permitting registration as to both principal and interest. Bonds purchased by FmHA will be registered in the name of “United States of America, Farmers Home Administration,” and will remain so registered at all time while the bonds are held or insured by the United States. The address of FmHA for registration purposes will be that of the appropriate FmHA State Office.

Vance L. Clark,
Administrator, Farmers Home Administration.

[FR Doc. 87-6708 Filed 4-16-87; 8:45 am]
BILLING CODE 3410-07-M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 87-ANE-7]

Airworthiness Directives; Teledyne Continental Motors (TCM) IO-520 and TSIO-520 Series Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This notice proposes to adopt an airworthiness directive (AD) that would require ultrasonic inspection of airmert and vacuum arc remelt steel alloy crankshafts and marking of the propeller mounting flange to indicate the heat codes and type of steel whenever the crankshaft is removed from the engine case or replaced on certain TCM 520 series engines. The proposed AD is needed to prevent the installation of crankshafts with subsurface fatigue cracks which could result in crankshaft failure with resultant loss of engine power.

DATE: Comments must be received on or before June 22, 1987

ADDRESSES: Comments on the proposal may be mailed in duplicate to: Docket No. 87-ANE-7 Federal Aviation Administration, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, Massachusetts 01803; or delivered in duplicate to Room 311 at the above address.

Comments delivered must be marked: “Docket No. 87-ANE-7”

Comments may be inspected at Room 311 between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday, except federal holidays.

The applicable service bulletin (M87-5) may be obtained from Teledyne Continental Motors, P.O. Box 90, Mobile, Alabama 36601.

A copy of the service bulletin is contained in the Rules Docket, Federal Aviation Administration, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, Massachusetts 01803.

FOR FURTHER INFORMATION CONTACT: Jerry C. Robinette, Aerospace Engineer, Propulsion Branch, ACE-140A, Federal Aviation Administration, Atlanta Aircraft Certification Office, 1669 Phoenix Parkway, Suite 210, Atlanta, Georgia 30349; telephone (404) 991-3810.

SUPPLEMENTARY INFORMATION: Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications should identify the regulatory docket number and be submitted in duplicate to the address specified above. All communications received on or before the closing date for comments will be considered by the Director before taking action on the proposed rule. The proposal contained in this notice may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket, at the address given above, for examination by interested persons. A report summarizing each FAA-public contact, concerned with the substance of the proposed AD, will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: “Comments to Docket No. 87-ANE-7.” The postcard will be date/time stamped and returned to the commenter.

The FAA has determined that subsurface fatigue cracks may be present in crankshafts used in TCM IO-520 and TSIO-520 series engines. There have been approximately 108 service difficulty reports between 1980 and 1986 concerning crankshaft failures. It has not been possible to assign a specific failure mode to these reports. They occur randomly and are not directly linked to specific forgings, heat codes, material processing or design. Ultrasonic inspection techniques have been developed by the manufacturer to test for subsurface defects on both new and used crankshafts. The ultrasonic inspection, if performed correctly, could preclude the installation of crankshafts with subsurface defects. Since these defects could exist or develop on other engines of the same type design, the
proposed AD would require ultrasonic inspection of the airmelt and vacuum arc remelt steel alloy crankshafts whenever the crankshafts are removed from the engine case or replaced on TCM IO-520 and TSIO-520 series engines.

Conclusion

The FAA has determined that this proposed regulation involves 35,000 engines and the approximate cost per engine per inspection would be $150. Therefore, I certify that this action (1) is not a "major rule" under Executive Order 12291; (2) is not a significant rule under DOT Regulatory Policies and Procedures (44 FR 11034; February 20, 1979); and (3) if promulgated, will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the draft evaluation prepared for this action is contained in the regulatory docket.

A copy of it may be obtained by contacting the person identified under the caption "FOR FURTHER INFORMATION CONTACT" or by contacting the person identified under the caption "FOR FURTHER INFORMATION CONTACT" by calling (602) 255-2893, (213) 514-6327.

List of Subjects in 14 CFR Part 39

Engines, Air transportation, Aircraft, Aviation safety, Incorporation by Reference.

The Proposed Amendment

PART 39—[AMENDED]

Accordingly, pursuant to the authority delegated to me, the Federal Aviation Administration (FAA) proposes to amend Part 39 of the Federal Aviation Regulations as follows:

1. The authority citation for Part 39 continues to read as follows:


§ 39.13 [Amended]

2. By adding to § 39.13 the following new Airworthiness Directive (AD):

Teledyne Continental Motors: Applies to Teledyne Continental Motors (TCM) IO-520 and TSIO-520 series engines.

Compliance is required as indicated unless already accomplished.

To prevent the installation of crankshafts with existing subsurface fatigue cracks at the next, and every subsequent, crankshaft removal from the engine case or installation of a replacement crankshaft:

(a) Prior to installation in the engine, conduct an ultrasonic inspection in accordance with TCM Service Bulletin M87-5, dated February 16, 1987 and Crankshaft Ultrasonic Inspection Procedure, Form X30554, dated February 1987.

(b) If no cracks are found, mark the crankshaft with serviceable crankshaft in accordance with TCM Service Bulletin M87-5, dated February 16, 1987.

(c) If no cracks are found, mark the crankshaft with serviceable crankshaft in accordance with TCM Service Bulletin M87-5, dated February 16, 1987.

Upon request, an equivalent means of compliance with the requirements of this AD may be approved by Manager, Atlanta Aircraft Certification Office, 1669 Phoenix Parkway, Suite 210, Atlanta, Georgia 30348.

The FAA will request the permission of the Federal Register to incorporate by reference the manufacturer's service information identified and described in this document.

Issued in Burlington, Massachusetts on April 8, 1987.

Jack A. Sahn,

Acting Director, New England Region.

[FR Doc. 87-8627 Filed 4-16-87; 8:45 am]

BILLING CODE 4910-10-M

14 CFR Part 39

[Docket No. 82-ANE-10]

Airworthiness Directives; Garrett Turbine Engine Company, Model TSE331-3 and TPE331-1, -2, -3, -5 and -6 Series Turboshaft and Turboprop Engines.

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: This notice proposes to adopt an airworthiness directive (AD) that would require periodic replacement/ rework of the third stage turbine stator assembly on certain TSE/TPE331 series engines. The proposed AD is needed to prevent thermal fatigue failure of the sheet metal inner seal support which has resulted in uncontained third stage turbine wheel failures.

DATES: Comments must be received on or before June 17 1987.

ADDRESSES: Comments on the proposal may be mailed in duplicate to: Federal Aviation Administration, New England Region, Office of the Regional Counsel, Attn: Rules Docket No. 82-ANE-10, 12 New England Executive Park, Burlington, Massachusetts 01803, or delivered in duplicate to Room 311 at the above address.

Comments delivered must be marked: "Docket No. 82-ANE-10"

Comments may be inspected at the New England Region, Office of the Regional Counsel, Room 311, between the hours of 8:00 a.m. and 4:30 p.m., Monday through Friday, except federal holidays.

The applicable Service Bulletin (SB) No. TPE/TSE331-72-0384, Revision 2, dated March 20, 1987 may be obtained from Garrett Airline Service Division, Technical Publications, Department 65-76, P.O. Box 29003, Phoenix, Arizona 85072; telephone (602) 225-2898/373.

A copy of the SB No. TPE/TSE331-72-0384, Revision 2, dated March 20, 1987 is contained in Rules Docket No. 82-ANE-10, at the Federal Aviation Administration, New England Region, Office of Regional Counsel, 12 New England Executive Park, Burlington, Massachusetts 01803.

FOR FURTHER INFORMATION CONTACT:


SUPPLEMENTARY INFORMATION:

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications should identify the regulatory docket number and be submitted in duplicate to the address specified above. All communications received on or before the closing date for comments will be considered by the Director before taking action on the proposed rule. The proposal contained in this notice may be changed in the light of comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket, at the address given above, for examination by interested persons. A report summarizing each FAA-public contact, concerned with the substance of the proposed AD, will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this notice must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. 82-ANE-10" The postcard will be date/time stamped and returned to the commenter.
After issuing AD 84-01-04, Amendment 39-4782 in which paragraph (g) requires a one time replacement of the Part Number (P/N) 868379-1 third stage turbine stators with P/N 868379-3 stators on certain TSE/TPE331 series engines, the FAA and manufacturer have determined, based on service experience, that the manufacturer’s recommended replacement interval of 6000 hours for the sheet metal inner seal support is inadequate. Three inner seal support failures, which resulted in uncontained third stage turbine wheel failures, occurred between 5000 and 6200 hours time-in-service. Although the failures initiated from low cycle fatigue, the material characteristics of the seal support were affected by time at high temperature. For this reason, the stators are life limited by hours rather than cycles. Since this condition is likely to exist or develop on other TSE/TPE331 series engines of the same type design, the proposed AD would require a periodic replacement/rework interval of the inner seal support on certain TSE/TPE331 series engines. If this proposal is adopted, the requirements set forth in paragraph (g) of AD 84-01-04, Amendment 39-4782, will be superseded.

Conclusion

The FAA has determined that this proposed regulation involves 1028 engines and the approximate cost would be $4,715 per engine. Therefore, I certify that this action (1) is not a “major rule” under Executive Order 12291; (2) is not a “significant rule” under DOT Regulatory Policies and Procedures (44 FR 11034; February 28, 1979); and (3) if promulgated, will not have a significant economic impact on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the draft evaluation prepared for this action is contained in the regulatory docket. A copy of it may be obtained by contacting the person identified under the caption “FOR FURTHER INFORMATION CONTACT”.

List of Subjects in 14 CFR Part 39

Engines, Air Transportation, Aircraft, Aviation Safety, Incorporation by reference.

The Proposed Amendment

PART 39—[AMENDED]

Accordingly, pursuant to the authority delegated to me, the Federal Aviation Administration (FAA) proposes to amend Part 39 of the Federal Aviation Regulations (FAR) as follows:

1. The authority citation for Part 39 continues to read as follows:


2. By adding to § 39.13 the following new airworthiness directive (AD):

Garrett Turbine Engine Company (GTEC, formerly AirResearch Manufacturing Company Arizona). Applies to GTEC engine models TSE331-3 and TPE331-1, -2, -3, -5 and -6 series engines with P/N 868379-1, or -3 third stage turbine stator assemblies.

Compliance is required as indicated, unless already accomplished.

To prevent uncontained third stage turbine wheel failures, accomplish the following: Replace P/N 868379-1 with a P/N 868379-3 third stage turbine stator assembly (if applicable); and rework P/N 868379-3 third stage stator assembly, per the schedule below, and thereafter at intervals not to exceed 4500 hours in service, all in accordance with the accomplishment instructions of Garrett Service Bulletin No. TPE/TSE331-72-0384, Revision 2, dated March 20, 1987, or FAA approved equivalent. Rework of the third stage stator support must include installation of a new sheet metal inner seal support.

<table>
<thead>
<tr>
<th>Third stage stator time since new or rework</th>
<th>Replacement and/or rework schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 4000 hours</td>
<td>Prior to accumulating 4500 hours in service, within 500 hours in service after the effective date of this AD, or prior to accumulating 5200 hours in service, whichever occurs first.</td>
</tr>
<tr>
<td>4000 to 5000 hours</td>
<td>Within 200 hours in service after the in service effective date of this AD.</td>
</tr>
<tr>
<td>Greater than 5000 hours</td>
<td>Within 200 hours in service after the in service effective date of this AD.</td>
</tr>
<tr>
<td>Time unknown</td>
<td>Within 200 hours in service after the in service effective date of this AD.</td>
</tr>
</tbody>
</table>

This AD supersedes the requirements of AD 84-01-04, paragraph (g), pertaining to P/N 868379-1 third stage stators.

Aircraft may be ferried in accordance with the provisions of FAR 21.197 and 21.199 to a base where the AD can be accomplished.

Upon request, an equivalent means of compliance with the requirements of this AD may be approved by the Manager, Los Angeles Aircraft Certification Office, Federal Aviation Administration, Northwest Mountain Region, 4344 Donald Douglas Drive, Long Beach, California 90808.

Upon submission of substantiating data by an owner or operator through an FAA maintenance inspector, the Manager, Los Angeles Aircraft Certification Office, Federal Aviation Administration, Northwest Mountain Region may adjust the compliance time specified in this AD.

The FAA will request the permission of the Federal Register to incorporate by reference the manufacturer’s service bulletin identified and described in this document.

Issued in Burlington, Massachusetts on April 3, 1987.

Clyde DeHart, Jr.,
Acting Director, New England Region.

[FR Doc. 87-8898 Filed 4-10-87; 8:45 am]

BILLING CODE 4910-12-M

FEDERAL TRADE COMMISSION

16 CFR Part 13

[Docket No. 9154]

Volkswagen of America, Inc., et al.,
Proposed Consent Agreement With Analysis To Aid Public Comment

AGENCY: Federal Trade Commission.

ACTION: Proposed consent agreement.

SUMMARY: In settlement of alleged violations of federal law prohibiting unfair acts and practices and unfair methods of competition, this consent agreement, accepted subject to final Commission approval, would require, among other things, a Troy, Mich., automobile company to offer impartial third-party arbitration programs to owners of certain Volkswagens and Audis with faulty valve seals and other oil consumption-related problems or with any internal engine component problems.

DATE: Comments will be received until June 16, 1987.

ADDRESS: Comments should be addressed to: FTC/Ooffice of the Secretary, Room 136, 6th Street and Pennsylvania Avenue NW., Washington, DC 20580.


SUPPLEMENTARY INFORMATION: Pursuant to section 6(f) of the Federal Trade Commission Act, 38 Stat. 721, 15 U.S.C. 48 and § 3.25(f) of the Commission’s Rules of Practice (16 CFR 3.25(f)), notice is hereby given that the following consent agreement containing a consent order to cease and desist, having been filed with and accepted, subject to final approval, by the Commission, has been placed on the public record for a period of sixty (60) days. Public comment is invited. Such comments or views will be considered by the Commission and will be available for inspection and copying at its principal office in accordance with § 4.9(b)(14) of the Commission’s Rules of Practice (16 CFR 4.9(b)(14)).

List of Subjects in 16 CFR Part 13

Arbitration, Automobiles, Trade practices.
Agreement Containing Consent Order to Cease and Desist

In the Matter of Volkswagen of America, Inc., a corporation, and Volkswagen AG, a corporation, Respondents.

The Agreement herein, by and between Volkswagen of America, Inc., a corporation ("VWoA"), hereinafter sometimes referred to as respondent, by its duly authorized officer, and its attorneys, and Volkswagen AG, a corporation ("VWAG"), by its attorneys, and counsel for the Federal Trade Commission, is entered into in accordance with the Commissioner's Rule governing consent order procedures. In accordance therewith the parties hereby agree that:

1. Respondent Volkswagen of America, Inc., is a corporation organized, existing and doing business under and by virtue of the laws of the State of New Jersey, with its office and principal place of business located at 888 West Big Beaver Road, in the City of Troy, State of Michigan.

Volkswagen AG is a corporation organized, existing and doing business under and by virtue of the laws of the Federal Republic of Germany with its office and principal place of business located at 3180 Wolfsburg, Federal Republic of Germany.

2. Respondent Volkswagen of America and Volkswagen AG have each been served with a copy of the Complaint issued by the Federal Trade Commission charging them with violation of section 5(a) of the Federal Trade Commission Act, 15 U.S.C. 45(a) (1980), and have each filed an answer to said complaint denying said charges.

3. This Agreement is for settlement purposes only and does not constitute an admission by respondent VWoA or by VWAG that the law has been violated as alleged in the said copy of the Complaint issued by the Commission.

4. Respondent Volkswagen of America, Inc. admits the jurisdictional facts set forth in the Commission's Complaint in this proceeding, except as set forth in Paragraph 5 of said Complaint.

5. Respondent Volkswagen of America, Inc. waives:
   (a) Any further procedural steps;
   (b) The requirement that the Commission's decision contain a statement of findings of fact and conclusions of law;
   (c) All rights to seek judicial review or otherwise to challenge or contest the validity of the order entered pursuant to this Agreement.

6. This Agreement shall not become part of the public record of the proceeding unless and until it is accepted by the Commission. If this Agreement is accepted by the Commission, it will be placed on the public record for a period of (60) days and information in respect thereto will be publicly released. The Commission thereafter may either withdraw its acceptance of this Agreement and so notify the respondent, in which event it will take such action as it may consider appropriate, or issue and serve its decision, in disposition of the proceeding.

7. This Agreement contemplates that, if it is accepted by the Commission, and if such acceptance is not subsequently withdrawn by the Commission pursuant to the provisions of § 3.25(f) of the Commission's Rules, the Commission may, without further notice to respondent VWoA: (1) Issue its decision containing the following Order to Cease and Desist in disposition of the proceeding, and (2) Make information public in respect thereto. When so entered, the Order to Cease and Desist shall have the same force and effect and may be altered, modified, or set aside in the same manner and within the same time provided by statute for other orders. The Order shall become final upon service. Delivery by the U.S. Postal Service of the decision containing the agreed to Order to respondent's address as stated in this Agreement shall constitute service. Respondent waives any right it may have to any other manner of service. The Complaint and Answer may be used in construing the terms of the Order not defined therein, and no agreement, understanding, representation, or interpretation not contained in the order or the Agreement may be used to vary or contradict the terms of the Order.

8. Respondent Volkswagen of America has read the Complaint and the Order contemplated hereby. It understands that once the Order has been issued, it will be required to file one or more compliance reports showing that it has fully complied with the order. Respondent further understands that it may be liable for civil penalties in the amount provided by law for each violation of the Order after it becomes final.

9. Volkswagen AG is a party to this agreement only for purposes of the dismissal of the complaint filed against it in Docket 9154.

Order

Definitions

For the purposes of this Order, the following definitions shall apply:

A. "VWoA"—Volkswagen of America, Inc., and its successors and assigns, and their officers, representatives, agents, and employees.

B. "Covered Vehicle"—A 1974-1979 model year gasoline powered Volkswagen or Audi vehicle equipped with a water-cooled engine, that was:
   (1) Distributed for sale in the United States by VWoA.
   (2) Warranted in writing by VWoA, or
   (3) Certified by the manufacturer to the National Highway Traffic Safety Administration and Environmental Protection Agency as meeting Federal safety and emissions standards.

C. "Specified Claims"—Claims made at any time prior to the expiration date of this Order by present or former owners or lessees (unless the lessor bore the cost of the claim) of covered vehicles concerning excessive oil consumption or engine damage due to lack of lubrication in covered vehicles other than claims for personal injury, damage to property other than the vehicle itself, or consequential damages such as lost value, profits, wages, or business opportunities. Specified claims do not include claims for which the owner or lessee has executed a release in consideration of settlement of an individual lawsuit. Specified claims also do not include claims that are covered by a binding final judgment on the merits in an individual lawsuit.

D. "Dealer"—Any person, partnership, firm or corporation which, pursuant to a Volkswagen or Audi Dealer Agreement with VWoA or any of its independent distributors, purchases or acquires on consignment from VWoA or its independent distributors vehicles for resale or lease to the public, including persons, partnerships, firms, or corporations owned or operated by VWoA or its independent distributors.

E. "Internal engine components"—All gasoline and diesel engine parts, components, and subassemblies included within the complete short block and cylinder head assemblies, including short blocks and cylinder heads, camshafts, valve train components, timing gears, flywheels, pistons, piston rings, crankshafts, connecting rods, and bearings, oil pumps, and associated fasteners, seals and gaskets.

F. "Product Service Publication" ("PSPs")—"Product Circulars," "Service Circualrs," "Technical Bulletins," and other documents substantially the same in content and purpose issued from time to time by VWoA to dealers, to regional offices or to independent distributors, or individual articles, notices, entries or the like in such documents, which describe, or recommend or discuss:
(1) Diagnostic, repair, or maintenance procedures; or
(2) Additional parts or upgrades or different replacement parts; or
(3) Non-repair information regarding the use and care of vehicles.

If a publication contains more than one subject which is considered a PSP then each such subject shall be considered to be an individual PSP.

PSPs do not include publicly available repair manuals, parts catalogs, price lists or supplements thereto.

G. "Product Condition"—The condition of a vehicle that gives rise to any repair, maintenance, use and care or diagnostic procedures or the use of additional, upgraded or different parts, that is or would be described in PSPs.

H. "PSP Index"—A document, clear and comprehensible to prospective purchasers and vehicle owners, which contains entries for all PSPs published during the term of this Order by VWoA.

(1) Each index shall contain an introductory section, which shall include the following information clearly and conspicuously stated:

(a) An explanation of the PSP Index and the "PSP Highlights" section;
(b) How to obtain PSPs from VWoA and how to review PSPs at VWoA's dealers;
(c) How to locate the "PSP Highlights" section; and
(d) The PSP prepared and issued pursuant to Paragraph C(1) of Section V.

(2) For each entry in the PSP Index, the following information will be clearly and conspicuously stated:

(a) The particular model(s), model year(s), and Vehicle Identification Numbers (if the PSP does not apply to the entire model year) to which the entry applies or potentially applies;
(b) The subject of the PSP;
(c) The major component or system of components to which the PSP relates;
(d) The identifying number of the PSP to which the entry relates; and
(e) Whether there is an entry in the "PSP Highlights" Section of the PSP index for the PSP.

(3) The PSP Index shall contain a separate section, readily accessible, entitled "PSP Highlights".

I. "PSP Highlights"—Information related to a particular PSP, that includes all of the following items as applicable:

(1) A description of the product condition;
(2) A description of the principal symptoms of the product condition;
(3) The steps or possible steps that can be taken to minimize or avoid the product condition;
(4) A statement that additional, upgraded or different parts are called for to address the product condition;
(5) A statement that the diagnostic, repair or maintenance procedure discussed in the PSP has to be repeated;
(6) A statement of the immediate and long-range performance consequences of the product condition; and, if avoidance of repair costs is a reason for undertaking the procedure, a statement of the estimated repair costs, if known, or, if not known, a characterization of such costs of not performing the procedures in a timely manner;
(7) The following statement: "The estimated cost of repairing this condition is [less than $150] [approximately $150-$250] [approximately $250-$400] [approximately $400-$800] [more than $800]." The cost range included shall be based on the cost calculated according to the formula set forth in Definition I(2); and
(8) A description of the underlying PSP(s) sufficient to permit an interested person to identify and order the PSP(s) from VWoA or review it at a dealer; and
(9) To the extent not apparent from the foregoing, a disclosure of the primary intended benefit(s) of this information.

J. "Costs"—

(1) "Reference cost" in Paragraph D of Section I means one hundred sixty-five dollars ($165), adjusted in the month when this order is served and annually thereafter, by a ratio, the numerator of which is the most recently published quarterly "Implicit Price Deflator" for the Cross National Product (IPD), and the denominator of which is the IPD for the second quarter of 1985, adjustments to be rounded to the nearest dollar. IPDs used in these annual adjustments shall have been computed using the same base year.

(2) "Cost(s)" other than "reference cost" in Paragraph D of Section I shall be calculated by adding the suggested retail price for parts which are or may be required and the applicable national average dealer warranty labor rate charges multiplied by the time required to effectuate the repair, replacement, diagnosis or maintenance as determined by the applicable Suggested Repair Times Manual or other labor time guide used by VWoA in the calculation of warranty reimbursement rates.

K. "Background Statements"—The documents attached hereto as Attachments A., and A100, B, and B100.

L. "Claimant"—Any person, partnership, corporation, or other entity, other than

(a) A dealer, or
(b) Any other entity which is engaged in the business of repairing, servicing, selling, leasing or trading motor vehicles or motor vehicle engines, or
(c) A commercial enterprise which operates a fleet of more than fifteen vehicles.

M. "United States"—The fifty states, the District of Columbia, and all commonwealths, territories, and possessions.

N. "Independent distributor"—Worldwide Volkswagen, Inc., Rioviera Motors, Inc., Volkswagen Mid-America, Inc., and any other person, partnership, firm or corporation that distributes VWoA's vehicles to dealers on a regular basis.

Q. "Engine damage due to lack of lubrication"—Claims of damage to internal engine components caused by insufficient lubrication.

P. "MQ Service Action Program"—The recall and reimbursement campaign initiated by VWoA beginning in February 1982 which included offers to replace valve stem seals and to reimburse prior valve stem seal replacement up to $125 in 1977 through 1979 Volkswagen Rabbit and Scirocco vehicles equipped with gasoline engines.

Q. "Arbitration agreement"—The form that sets out issues to be arbitrated concerning claims relating to internal engine components as described in Rule 4 of Attachment C.

I

It is Ordered that respondent Volkswagen of America, Inc., its successors and assigns, and their officers, representatives, agents, and employees, acting directly or through any subsidiary, division, or other device in connection with the advertising, offering for sale, sale, or distribution of any vehicle in or affecting commerce in the United States, as "commerce" is defined in the Federal Trade Commission Act, do forthwith cease and desist from:

A. Failing to continue VWoA's program of issuing PSPs in a manner comparable to the program as it existed in the years 1980 through the date of service of this Order, with such program to continue to take into account current criteria used for issuing PSPs, such as the frequency with which the product condition has occurred and is expected to occur, the repair costs to the consumer, and the significance to the consumer of the product condition; and failing to utilize information sources such as internal corporate testing and engineering programs, marketing and other surveys purchased or used by VWoA, information from the manufacturer(s) of affected vehicles or vehicle parts, and reports from customers, dealers, and independent distributors.
B. Within 30 days after the date of service of this Order, failing to prepare and issue PSP Indexes for the 1985 model year and thereafter failing to prepare and issue PSP Indexes for PSPs issued in each model year after the 1985 model year.

C. Failing to prepare and issue an entry in the PSP Index for each PSP issued, to include each such entry in an updated PSP Index, and to update cumulatively each quarter all PSP Index entries for all PSPs issued by VWoA, with each such updated PSP index to be forwarded to dealers and be available from VWoA within four months after issuance to dealers of any PSP that was not included in a prior index.

D. Failing to prepare and include an entry in the “PSP Highlights” section of the PSP Index, and reference it appropriately in the PSP Index, whenever:

(1) The PSP describes repair, maintenance, or diagnostic procedures not specifically covered in previously applicable repair manuals, either (i) where the cost of such procedures to a customer is reasonably expected to exceed the reference cost, or (ii) where the procedures are intended and designed to prevent future repair or replacement costs to a customer reasonably expected to exceed the reference cost; or

(2) The PSP describes revisions to repair, maintenance, or diagnostic procedures in an existing repair manual where the revisions are intended and designed either (i) to prevent future repair or replacement costs to a customer reasonably expected to exceed the reference cost, or (ii) to reduce such costs by an amount reasonably expected to exceed the reference cost; or

(3) The PSP describes modified (including additional, different, or upgraded) parts recommendations, where the modification is intended and designed (i) to prevent future repair or replacement costs to a customer reasonably expected to exceed the reference cost, or (ii) to reduce such costs by an amount reasonably expected to exceed the reference cost; or

(4) The PSP describes (i) information revising or updating information contained in owner’s manuals or maintenance schedules or (ii) non-repair information regarding the use and care of vehicles by vehicle owners or operators.

E. Beginning with the next model year commencing after the date of service of this Order, failing to disclose for each model year, in a clear and conspicuous manner, in each vehicle owner’s manual or warranty booklet (where it shall be itemized in the Table of Contents and Index) for each of its vehicle lines,

(1) The following statement in the exact language set forth below:

Updated Service Information You Can Obtain

Volkswagen of America monitors product performance in the field and regularly sends to dealers the latest service information about [VW] [Audi] vehicles. Now, you too can get these bulletins.

Bulletins cover a wide variety of subjects: the proper use and care of your car; costly repairs; inexpensive repairs or adjustments which, if done early may avoid costly future repairs. Some bulletins describe repairs about new or unexpected conditions. Others describe improved repair procedures or parts improvements. All of this information can also help a qualified mechanic better service your vehicle.

Most bulletins apply to conditions affecting a small number of vehicles. Your dealer or a qualified mechanic may have to determine if a specific bulletin applies to your vehicle.

You can order any or all of these bulletins direct from Volkswagen of America or look at them at a [VW] [Audi] dealer. You can purchase a subscription to the bulletins which apply to a particular model and receive them as they are issued, or you can order an index which lists and identifies these bulletins and summarizes the most important ones. You also can order individual bulletins. However, the index is necessary to identify them.

(2) The above statement shall in addition provide at least the following information in clear and comprehensible language:

(a) Concerning indexes—

(i) Indexes list each PSP provide ordering information for individual PSPs, and are cumulatively updated quarterly.

(ii) Indexes contain plain-language highlights and summaries of PSPs describing costly repairs and designed to help prevent major repairs or containing owner use and care information.

(iii) If there is a charge for PSP indexes, it shall be credited against any charge for PSPs ordered.

(iv) When consumers order any index, they will receive the latest applicable index for the model year of the car unless they request an index for a different model year.

(b) Concerning PSPs—

(i) The charge for individual PSPs, if any, and how to order them.

(c) Concerning subscriptions—

(i) The charge for subscriptions and how to order them.

(ii) That subscribers are entitled to all PSPs published for a model and model year.

(3) The following statement in the exact language set forth below, which shall be made in conjunction with the statement described above, but which shall not precede disclosure of the information described in Paragraphs E (2)(a) (i) and (ii) of Section I:

Caution

These bulletins are intended for qualified mechanics. They are not meant for the casual do-it-yourselfer. Qualified mechanics have the equipment, tools, safety instructions, and know-how to do a job properly and safely. Improperly performed repairs or maintenance can adversely affect the safety of your vehicle, possibly leading to accident or injury. They may also impair the economy, durability or reliability of your vehicle and may void the warranty on your car. If you are not sure that you can perform a job properly and safely, you should not try to do so.

F. Beginning with the next model year commencing after the date of service of this Order,

(1) Failing to include for each model year, in each vehicle owner’s manual, warranty booklet, or similar literature provided with the vehicle at the time of delivery to the original retail customer a postage-paid ordering coupon to obtain a properly identified PSP index (including PSP Highlights), a PSP or subscription; or

(2) Failing to maintain a toll-free telephone system, which number shall be clearly and conspicuously disclosed in close proximity to the information set out in Paragraph E of Section I, to enable members of the public to order PSP indexes (including PSP Highlights, PSPs, or a subscription to PSPs).

G. Failing to furnish each dealer with:

(1) Each PSP Index (including PSP Highlights) on paper or through such other medium as approved by designated representatives of the Federal Trade Commission, related to the vehicles represented by that dealership; and

(2) Each PSP and

(3) An adequate supply of postage-paid ordering coupons for PSPs, PSP subscriptions and PSP indexes.

H. Beginning with the date of service of this Order, and once in each 6-month period thereafter, failing to recommend and urge, in writing, that each dealer shall:
(1) Provide information on how to order PSPs to anyone who requests such information; 
(2) Provide members of the public with ready access to the PSPs and PSP Indexes (including PSP Highlights) furnished to such dealers, including any equipment needed to enable members of the public to read PSPs at dealerships; and 
(3) Update PSP Indexes (including PSP Highlights) immediately upon receipt.

I. Beginning with the next model year after the date of service of this Order, failing to include the following statement, in the exact language set out below, clearly and conspicuously on the face of the label required by the “Automobile Information Disclosure Act,” 15 U.S.C. 1231 et seq., (1980) (as amended) on each vehicle distributed by VWoA in the United States:

**UPDATE SERVICE INFORMATION—NOW YOU CAN GET USEFUL BULLETINS AND EASY-TO-READ SUMMARIES TO SERVICE YOUR CAR BETTER AND HELP AVOID COSTLY REPAIRS. THESE ARE THE SAME BULLETINS WE SEND YOUR DEALER. SEE YOUR DEALER’S INDEX OF PRODUCT CIRCULARS FOR DETAILS.**

J. Beginning with the next model year after the date of service of this Order, failing to include the following statement, in the exact language set out below, clearly and conspicuously, in each principal point of sale catalog distributed by Volkswagen of America for each of its vehicle lines:

**A Word About Updated Service Information**

[Volkswagen] [Audi] regularly sends its dealers useful service information about our products. [Volkswagen] [Audi] monitors product performance in the field. We then prepare bulletins for servicing our products better and helping to avoid costly repairs. Now you can get these bulletins, too. To get ordering information, see a local [VW] [Audi] dealer.

K. Failing to include detailed information regarding the third-party arbitration program described in Sections III and IV, and the PSP program described in this section, in all ongoing and future training programs and in materials disseminated to dealers on subjects related to customer relations, beginning not later than one hundred eighty (180) days after service of this Order and continuing for the duration of this Order.

II. It is Further Ordered, that:

A. Beginning with the date of service of this Order, upon written request by any person, VWoA shall mail or cause to be mailed, by first class mail, the following:

(1) Information describing PSPs, PSP Indexes, and PSP subscriptions, as well as how to obtain PSPs, PSP Indexes and PSP subscriptions;
(2) The most current PSP Index, provided that, the “PSP Highlights” in the PSP Index may be limited to the particular vehicle make, model and model year identified in the request;
(3) Any specifically identified PSPs;
(4) Subscriptions to all PSPs.

B. Subject to the limitations of this section, VWoA may, at its option, impose a reasonable charge for PSPs, PSP Indexes and PSP subscriptions. Any charge for a PSP Index must be credited toward the initial purchase of PSPs themselves. The maximum charges shall be as follows:

(1) For PSP Indexes ordered:
   (a) Model years prior to 1988, no charge;
   (b) Through 1990, a charge not to exceed two dollars ($2.00) for any PSP Index;
   (c) For years 1991 and thereafter, a charge not to exceed three dollars ($3.00) for any PSP Index.
(2) For individual PSPs, a charge not to exceed four dollars ($4.00) for the first PSP requested in each order and two dollars ($2.00) for each additional PSP requested in that order;
(3) For PSP subscriptions, a charge not to exceed the lower of the reasonable cost or the charge (if any) to dealers.

C. VWoA may offer subscriptions of any duration, provided that, VWoA offers the option of a subscription with a one-year duration.

III. It is Further Ordered that:

A. VWoA shall make available in the United States to claimants an arbitration program, which shall be administered through an independent and impartial third party, to resolve expeditiously and fairly (1) each specified claim regardless of time in service, mileage, or whether the claimant still owns or leases the vehicle; and (2) each claim made or renewed after the date of service of this order by owners and lesses (unless the lessor bore the cost of the claim) of any Volkswagen or Audi vehicle distributed by VWoA, warranted in writing by VWoA, or certified by the manufacturer to the responsible federal agencies as meeting applicable federal safety and emission standards involving the claimed failure, malfunction, repair or replacement of internal engine components while the claimant owns or leases the vehicle, regardless of time in service or mileage.

provided, however, that VWoA need not make the arbitration program described above available to claimants:

(1) For claims involving repairs required to place a vehicle in operating condition an engine which was not operable when the vehicle was purchased or leased by an owner or lessee, other than the original retail purchaser or original lessee; or
(2) For claims involving internal engine components.

(2a) Whose claims were the subject of a claim by a prior owner or lessee which was settled or resulted in an arbitration award which the prior owner or lessee accepted, or

(b) If the claimant sells the vehicle prior to sixty days after the claimant notified the independent and impartial third party administrator of the claim, unless the claimant does the following:

(i) Notifies VWoA in writing at least ten days before the vehicle is disposed of; and

(ii) Gives VWoA an opportunity to inspect the vehicle at a mutually convenient time and place.

B. The decision of the arbitrator shall be binding on VWoA, but non-binding on the claimant, unless the claimant elects to accept an arbitration award.

C. (1) With respect to specified claims, such third-party arbitration program shall be conducted in accordance with the Modified Rules for Arbitration published by the Council of Better Business Bureaus as specially modified and set forth in Attachment D, and

(2) With respect to claims relating to internal engine components, such third-party arbitration program shall be conducted in accordance with the Modified Rules for Arbitration published by the Council of Better Business Bureaus as specially modified and set forth in Attachment C.

provided, however, the Rules for Arbitration may be modified only with the written approval of designated representatives of the Federal Trade Commission.

D. For two years after the date of service of this order, such third-party arbitration program shall be conducted at no charge to the claimant by VWoA or the independent and impartial third-party administrator. Thereafter, no charges shall be imposed on claimants by VWoA or the independent and impartial third-party administrator that exceeds charges specified in the Modified Rules for Arbitration published by the Council of Better Business Bureaus.

E. No settlement of or judgment on the merits in a class action lawsuit shall affect a claimant’s right to request
arbitration of a specified claim or claim relating to internal engine components under this Order, provided that, a specified claim or claim relating to internal engine components is not eligible for arbitration if:

(1) The claimant received actual notice of the pendency or settlement of the class action; and

(2) The notice of pendency and, if applicable, settlement of such class action was approved by designated representatives of the Federal Trade Commission prior to submission of the notice to the court by VWoA, as fully, accurately, clearly and conspicuously disclosing the availability of the arbitration program described in Sections III and IV; and

(3) The claimant did not request exclusion from the class action or settlement, or the claimant received a notice to the court by the office as may be appropriate) of the fifty states, the District of Columbia, commonwealths, territories and possessions, and shall:

(1) Provide each such office with a copy of this Order.

(2) Describe in such mailing VWoA’s third-party arbitration program.

(3) Describe in such mailing the PSPs and PSP indexes and explain how consumers can obtain them.

(4) Inform each such office that VWoA will, if the appropriate office wishes, within fifteen days after receipt from such office or sixty days after the date of service of this order, whichever is later, notify by first-class mail each person who has complained to that office about a specified claim, and that VWoA will provide that person in the same mailing envelope with:

(a) Information about the availability of VWoA’s third-party arbitration program; and

(b) One or more of the appropriate Background Statements as required to be distributed pursuant to Paragraph B of Section IV in connection with any specified claim.

(5) Request that each such office provide VWoA with (a) a copy of each complaint that may include a specified claim; or, at the option of that office, (b) the owner’s name and address, and the nature of the specified claim.

(6) Inform each such office that VWoA will also send, by first-class mail, a notice to any person who has complained to any other state or local law enforcement or consumer affairs office about a specified claim, and urge such office to encourage state and local law enforcement or consumer affairs offices to forward to VWoA either copies of such complaints, or, at the option of the forwarding office, a list of the names, and addresses of persons with specified claims and the amount and nature of each such claim, if known.

B. For purposes of Paragraph B of Section IV only:

—A “claim” has been made if, for any oral or written request for reimbursement or repair, a document was created or received by VWoA or any of its independent distributors, including, but not limited to, warranty records, consumer letters, dealer reports, or records of telephone calls;

—“Open or unsatisfactorily resolved” claims are any claims for which the claimant did not receive all payments or free repairs claimed or requested.

VWoA shall send by first class mail Attachments A (or A100 if the vehicle was an Audi 100), B (or B100 if the vehicle was an Audi 100), E(1) and F, and a postage-paid return envelope, or, if VWoA wishes to make an initial settlement offer, Attachments A (or A100 if the vehicle was an Audi 100), B (or B100 if the vehicle was an Audi 100), E(1) and F, and a postage-paid return envelope to the following:

(1) Every claimant who, prior to the [date of service of this Order], had made a specified claim that is open or unsatisfactorily resolved or who, prior to the [date of service of this Order] notified VWoA’s independent distributors of such claim(s):

(2) Every claimant who has received reimbursement of $125 under VWoA’s MQ service action program, and who submitted repair orders or other documentation showing that one or more of the following repairs occurred at a total expense of more than $125.00 which has not been fully reimbursed as of the date of service of this Order:

(a) Cylinder head replacement;

(b) Any repair involving cylinder head removal and valve repair;

(c) Replacement of the engine short block;

(d) Replacement of any one or more of the following:

(i) Crankshaft;

(ii) Connecting rod(s);

(iii) Main bearing(s);

(iv) Connecting rod bearing(s);

(v) Pistons;

(vi) Piston rings.

(3) Every claimant with a specified claim whose name had been supplied to VWoA by the offices referred to in Paragraph A of Section IV the Federal Trade Commission, or any other consumer affairs office or any third party, and whose specified claim remains open or unsatisfactorily resolved prior to the date of service of this Order.

(4) Every claimant with a specified claim which is open or unsatisfactorily resolved whose name will have been supplied to VWoA after the date of service of this Order by the offices referred to in Paragraph A of Section IV the Federal Trade Commission, or any other consumer affairs office or any third party; and

(5) Every claimant with a specified claim which is open or unsatisfactorily resolved who, orally or in writing, contacts VWoA, any office of the independent and impartial third party administrator, or VWoA’s independent distributors after [the date the Commission accepts this Order for comment].

Provided, however, that for any mailing made pursuant to this section which is returned to the sender as being undeliverable, VWoA shall make a reasonable attempt to obtain the claimant’s current address, and shall
send the mailing by first class mail to the claimant's current address; provided, further, Attachments A and B or Attachments A100 and B100, as applicable, shall be fastened or otherwise physically attached with Attachment B (or Attachment B100) on top of Attachment A (or Attachment A100).

C. The following deadlines shall apply:

(1) For initially mailing the materials specified in Paragraph B of Section IV, (a) With respect to claimants included in Paragraphs (B) (1), (2) and (3) of Section IV all materials shall be mailed according to the following schedule:

(i) Not less than 25% of the total number shall be mailed within 15 days of the date of service of this order;

(ii) Not less than 50% of the total number shall be mailed within 45 days of the date of service of this order;

(iii) Not less than 75% of the total number shall be mailed within 75 days of the date of service of this Order; and

(iv) 100% of the total number shall be mailed within 90 days of the date of service of this Order.

(b) With respect to claimants included in Paragraphs (B) (4) and (5) of Section IV, whose claims are not included in Paragraphs (B) (1), (2) or (3) of Section IV all materials shall be mailed within fifteen days after receipt by VWoA, the independent and impartial third party administrator, or VWoA’s independent distributors of the name and address of the claimant, or sixty days after the date of service of this order, whichever is later.

(2) For the handling of specified claims:

(a) (i) Claimants who accept settlement offers shall be sent the applicable monetary amount within forty-five (45) days after the settlement offer acceptance is received by VWoA;

(ii) Claimants who accept arbitration awards shall be sent the applicable monetary amount within forty-five (45) days after the arbitration award acceptance is received by the independent and impartial third party administrator.

(b) (i) Any applicable repair shall be performed within thirty (30) days after the settlement offer acceptance is received by VWoA;

(ii) Any applicable repair shall be performed within thirty (30) days after the arbitration award acceptance is received by the independent and impartial third party administrator, except as otherwise ordered by the arbitrator for good cause shown.

(c) Claimants who request to participate in the independent and impartial third party arbitration program by returning the “RESPONSE TO VOLKSWAGEN MEDIATION AND ARBITRATION PROGRAM” form included with Attachment E (1) or (2), shall have an arbitration hearing completed within 60 days after the “RESPONSE TO VOLKSWAGEN MEDIATION AND ARBITRATION PROGRAM” form included in Attachment E (1) or (2) is received by VWoA, regardless of whether the claimant requests mediation services. Provided, however, that delays attributable solely to the claimant shall not be included in the calculation of deadlines. The burden of proving that the delay is attributable solely to the claimant shall be on VWoA;

(3) For claims involving internal engine components that do not involve specified claims:

(a) An arbitration hearing shall be completed within sixty (60) days after the claimant provides the independent and impartial third party administrator, with the model, model year, and Vehicle Identification Number of the vehicle and a statement describing the nature of the complaint, regardless of whether the claimant requests mediation services. Provided, however, that delays attributable solely to the claimant shall not be included in the calculation of deadlines. The burden of proving that the delay is attributable solely to the claimant shall be on VWoA;

(b) (1) (i) Claimants who accept settlement offers shall be sent the applicable monetary amount within forty-five (45) days after the settlement offer acceptance is received by VWoA;

(ii) Any applicable repair shall be performed within thirty (30) days after the settlement offer acceptance is received by VWoA;

(ii) Not less than 50% of the total number shall be mailed within 45 days of the date of service of this order.

D. Claimants with specified claims may not be required to fill out any other form to request an arbitration hearing once they have checked Choice 2 or 3 on the form included with Attachment E(1) or Choice 1 or 2 on the form included with Attachment E(2).

E. VWoA may not request a claimant who accepts an offer to settle a specified claim to execute a statement releasing VWoA from further liability if the statement purports to release VWoA from liability that, at the time the claim was settled, would not have been subject to arbitration as described in Sections III and IV

F. Within thirty (30) days of service of this Order, VWoA shall provide to its independent distributors and appropriate employees of VWoA, including employees who have responsibility for receiving and responding to consumer complaints, written instructions stating that all consumers who make a specified claim in any oral or written communication received after the date of service of this Order must be sent, by first-class mail, a letter providing the documents specified in Paragraph B of Section IV above, within fifteen days, or sixty days after the date of service of this order, whichever is later.

G. VWoA may make an immediate binding settlement of a specified claim prior to the initiation of mediation or arbitration, provided that, prior to the settlement, the claimant received all of the materials required to be sent to the claimant pursuant to Paragraph B of Section IV (either Attachments E(1) or E(2) [Cover letter] and Attachments A or A100, as applicable), B or B100, as applicable) [Background Statements], and F (BBB specified claim brochure).

H. All envelopes sent pursuant to Paragraph B of Section IV shall bear no marking, other than the name and address of VWoA and the addressee, and the words “IMPORTANT REIMBURSEMENT INFORMATION” disclosed conspicuously on the front.

I. VWoA shall offer to each claimant at the outset of each arbitration hearing all of the materials required to be sent to the claimant pursuant to Paragraph B of Section IV (either Attachments E(1) or E(2) [Cover letter] and Attachments A or A100, as applicable), B or B100, as applicable) [Background Statements], and F (BBB specified claim brochure).

J. VWoA shall obtain, maintain, and retain for a period of three (3) years from the date of resolution of each claim, records sufficient to show to the satisfaction of designated representatives of the Federal Trade Commission:

(1) For each specified claim:

(a) The following dates as applicable:

(i) The date VWoA received the claimant's name and address, if the specified claim was received by VWoA pursuant to Paragraph B (4) and B (5) of Section IV:

(ii) The date the delay was attributable solely to the claimant is received by VWoA;

(iii) The date the independent and impartial third party administrator, if VWoA or any other person other than the independent and impartial third party administrator is responsible for the delay, is attributable solely to the claimant is received by VWoA.

(iii) The date of receipt of all the materials specified in Section IV, including attachments included with the responsive communications to claimants.

(iv) The date of receipt of all the materials specified in Section IV, including attachments included with the responsive communications to claimants.

(v) The date the delay is attributable solely to the claimant is received by VWoA.

(vi) The date of settlement pursuant to Paragraph B of Section IV.

(vii) The date of the settlement offer acceptance is received by VWoA.

(viii) The date the claimant was settled, would not have been subject to arbitration as described in Sections III and IV.

(v) The claimant's name and address, if the specified claim was received by VWoA pursuant to Paragraph B (4) and B (5) of Section IV.
(ii) The date the materials described in Paragraph B of Section IV were mailed;

(iii) The date each written response was received by VWoA from the addressee of Attachment E(1) or E(2);

(iv) The date an arbitration hearing was scheduled;

(v) The date the arbitration hearing was completed;

(vi) The date the arbitrator's decision was received by the independent and impartial third-party administrator;

(vii) The date(s) VWoA made each offer to settle the claim;

(viii) The date the claimant accepted or rejected each settlement offer;

(ix) The date the claimant accepted or declined the arbitrator's award;

(x) The date a check was sent to satisfy an arbitration award or settlement agreement;

(xi) The date scheduled for any repair offered as a result of an arbitration award or settlement agreement;

(xii) The date any repair offered as a result of an arbitration award or settlement agreement was actually performed.

(b) The following documents and information, as applicable:

(i) The vehicle model;

(ii) The vehicle model year;

(iii) The vehicle identification number;

(iv) A brief description of the alleged problem, including whether the claimant included information suggesting that excessive oil consumption or engine damage due to lack of lubrication might be involved;

(v) The resolution(s) sought by the claimant: repair, cash reimbursement or vehicle repurchase;

(vi) The amount, if any, of cash reimbursement sought;

(vii) The terms of each offer, if any, made by VWoA to settle the claim;

(viii) The response of the claimant to each settlement offer;

(ix) A copy of each arbitrator's decision including the amount of any cash reimbursement;

(x) Whether the claimant accepted the arbitrator's award;

(xi) The name and address of each claimant who owned or leased a covered vehicle, and requested to participate in the mediation and arbitration program set forth in Sections III and IV and was refused the opportunity to participate in the mediation and arbitration program.

(xii) The reason(s) each claimant described in Paragraph J(1)(a)(xii) of Section IV was determined not to have a specified claim.

(xiii) The reason(s) known to VWoA or the independent and impartial third-party administrator for the failure to resolve a claim other than by settlement or an arbitration decision;

(xiv) If the claim is settled, whether a third-party mediator actively participated in settlement discussions.

(xv) A copy of the "RESPONSE TO VOLKSWAGEN MEDIATION AND ARBITRATION PROGRAM" form completed by the claimant;

(xvi) The name and address of each claimant who contacts orally VWoA, the independent and impartial third-party administrator, or VWoA's independent distributors and states facts that suggest that the claimant may have a specified claim.

(2) For each mediation or arbitration of a claim involving an internal engine component:

(a) The following dates, as applicable:

(i) The date VWoA mailed Attachment G, described in Paragraph G of Section III;

(ii) The date the claimant first contacted the independent and impartial third-party administrator;

(iii) The date the independent and impartial third-party administrator received from the claimant the model, model year, Vehicle Identification Number of the vehicle and a statement describing the nature of the claim;

(iv) The date VWoA was notified by the independent and impartial third-party administrator that a claim involving internal engine components had been lodged;

(v) The date the arbitration agreement was sent to the claimant;

(vi) The date the arbitration agreement was received from the claimant by the independent and impartial third-party administrator;

(vii) The date the initial arbitration hearing was scheduled;

(viii) The date the initial arbitration hearing was completed;

(ix) The date the arbitration decision was mailed to the claimant;

(x) The date the claimant accepted or rejected each settlement offer from VWoA;

(xi) The date the claimant accepted or rejected an arbitration award.

(b) The following information:

(i) The vehicle model;

(ii) The vehicle model year;

(iii) The vehicle identification number;

(iv) A brief description of the problem alleged;

(v) The resolution(s) sought by the claimant: repair, cash reimbursement or vehicle repurchase;

(vi) The amount, if any, of cash reimbursement sought;

(vii) The terms of each offer, if any, by VWoA to settle the claim before the claimant contacted the independent and impartial third-party administrator;

(viii) The terms of each offer, if any, by VWoA to settle the claim after the claimant contacted the independent and impartial third-party administrator;

(ix) The response of the claimant to each settlement offer;

(x) A copy of each arbitrator's decision including the amount of any cash reimbursement;

(xi) Whether the claimant accepted or rejected the arbitrator's award;

(xii) The reason(s) for the failure to resolve a claim other than by settlement or an arbitration decision;

(xiii) If the claim is settled, whether a third-party mediator actively participated in settlement discussions.

(xiv) A copy of the arbitration agreement.

(xv) The name and address of each claimant who requested the opportunity to participate in the third-party mediation and arbitration program set forth in Sections III and IV and was refused the opportunity to participate in said mediation and arbitration program.

(xvi) The reasons each claimant specified in Paragraph J(2)(b)(xv) was determined not to be eligible to participate in the mediation and arbitration program set forth in Sections III and IV.

(3) Computer disks, tapes or other computer-readable media created or maintained by VWoA, on behalf of VWoA, or by the independent and impartial third-party administrator that contain any information specified in Paragraphs J(1) and J(2) of Section IV, and necessary relevant programming and other explanatory data sufficient to enable the Federal Trade Commission to read and analyze the data contained on such media.

V

It is further ordered that:

A. At least two times, at least one month apart, within 120 days after the date of service of this order, VWoA shall place and cause to be disseminated the advertisement attached as Attachment H(1) in national magazines as full-page advertisements. At least two times, at least one month apart, within 120 days after the date of service of this order, VWoA shall place and cause to be disseminated the advertisement attached as Attachment H(2) in national magazines as full-page advertisements. Each time Attachment H(1) is placed and each time Attachment H(2) is placed, the magazines shall have the combined total non-duplicated readership ("net reach") of at least seventy-five million adults as measured by an outside organization generally recognized as competent and
experienced in this field and used by VWoA or its advertising agencies for other advertising research. The demographic characteristics for the combined total readership of the magazines selected for such advertisements must be generally representative of the demographic characteristics of the population of owners and potential purchasers of Volkswagen vehicles (for Attachment H(1)) and Audi vehicles (for Attachment H(2)).

B. Beginning with the next model year commencing after the date of service of this Order, VWoA shall annually include in any edition of each proprietary magazine sent by VWoA to a primary target audience of VWoA’s vehicle owners:

(1) The statements set forth in Paragraph J of Section I set forth clearly and conspicuously; and

(2) A full page reproduction of Attachment H(1) for Volkswagen owners, or Attachment H(2) for Audi owners, as applicable.

C. Within thirty days after the date of service of this Order, VWoA shall furnish to each of its dealers three display posters, with the form and content of Attachment I(1) (for Volkswagen dealers) or I(2) (for Audi dealers), each at least 24" x 30"

Thereafter, VWoA shall furnish additional copies of these posters upon request by any dealer.

D. Beginning with the date of service of this Order, and once in each 6-month period thereafter, VWoA shall recommend and urge, in writing, that each dealer shall:

(1) Place the display poster, described in Paragraph C of Section V in conspicuous and accessible locations within:

(a) Service waiting areas; and

(b) Parts departments; and

(c) Service payment areas.

E. (1) Within five (5) days after the date of service of this Order, VWoA shall establish and maintain a toll-free telephone system which will elicit information to enable current and former lessees to enter the independent and impartial third-party arbitration programs set forth in Sections III and IV.

The toll-free telephone system shall have sufficient capacity to enable each call made by owners and lessees to be answered reasonably promptly. Each caller shall be requested to furnish the following information, which shall be documented:

(a) Name, address and telephone number of the caller;

(b) Model and model year of the vehicle;

(c) Nature of the claim, including sufficient information to ascertain whether a specified claim is alleged, and if so, whether the specified claim includes an allegation of engine damage from lack of lubrication.

(d) The date of the call.

(2) Each caller to the toll-free number described in Paragraph E(1) of Section V shall also (a) be informed that, if the caller states facts suggesting that a specified claim may be involved, that VWoA will mail a letter describing the third-party arbitration program to the caller; or (b) if the caller states no facts suggesting that the claim may be a specified claim, the caller shall be informed of the toll-free telephone number (or "call collect" number, as applicable), of the local office of the independent and impartial third-party administrator.

F. Beginning with the next model year commencing after the date of service of this Order, VWoA shall include the following information, in a clear and conspicuous manner, in each vehicle owner's manual or warranty booklet (where it shall be itemized in the Table of Contents and Index):

(1) A description of the mediation and arbitration program for internal engine components required by Sections III and IV:

(2) An explanation of how the owner or lessee can enter the mediation and arbitration program;

(3) A description of applicable time deadlines as set forth in Paragraph C(3) of Section IV;

(4) The toll-free telephone number described in Paragraph E of Section V;

(5) A statement that there is no charge to the consumer for participating in the program, if such is the case, or a statement of any charges to the consumer for participating in the program; and

(6) A statement that the arbitration award is binding on VWoA, but is not binding on the consumer, unless the consumer elects to accept the arbitration award.

G. (1) Within thirty days after the date of service of this Order, VWoA shall prepare and issue a PSP which includes the following information:

(a) A description of the mediation and arbitration program for internal engine components required by Sections III and IV;

(b) An explanation of how the owner or lessee can enter the mediation and arbitration program;

(c) A description of applicable time deadlines as set forth in Paragraph C(3) of Section IV;

(d) The toll-free telephone number described in Paragraph E of Section V;

(e) A statement that there is no charge to the consumer for participating in the program, if such is the case, or a statement of any charges to the consumer for participating in the program; and

(f) A statement that the arbitration award is binding on VWoA, but is not binding on the consumer, unless the consumer elects to accept the arbitration award.

(2) The PSP referred to in Paragraph G(1) of Section V shall, during the term of this order, be included with each PSP index ordered.

VI

It is further ordered that Sections I, II, III, IV and V of this Order shall expire eight years after the date of service hereof, provided, that if at any time during which said sections remain in effect, the Commission issues a final trade regulation rule imposing obligations on the automobile industry comparable to those imposed under any such section(s), such section(s) shall terminate upon the effective date of such rule, and, in such event, VWoA shall advise the Commission of its intention to rely upon any such rule as having terminated and superseded such section(s) of this Order thirty (30) days in advance of reliance thereon: provided further, that if at any time during which such section(s) remain in effect the Commission issues a final guide under Sections 1.5 and 1.6 of the Commission's Rules of Practice imposing obligations on the automobile industry comparable to those imposed under any such section(s), then the Commission shall, upon VWoA motion or upon the Commission's own motion, open this proceeding within one hundred twenty (120) days of such motion, and, within a reasonable time thereafter, vacate any such section(s) of this Order, unless the Commission finds that such section is not required by changed conditions of law or fact or is not in the public interest; and provided further, that nothing herein shall preclude VWoA at any time from moving the Commission to alter, modify, or set aside this Order under the Commission's Rules of Practice.

VII

It is further Ordered that:

A. VWoA shall, within one hundred twenty (120) days after the date of service of this Order, file with the Commission a report, in writing, setting forth in detail the manner and form in which it has complied with this Order.

B. VWoA shall, within one hundred twenty (120) days after the implementation of the PSP program
G. Upon request by the Federal Trade Commission, VWoA shall obtain and make available to the Federal Trade Commission in the English language within forty-five days after the request any records relevant to Paragraph A of Section I in the possession of the manufacturer of any vehicles, engines, or transmissions which VWoA imports or distributes; provided, however, that submission of such records shall neither constitute nor be deemed an admission by any entity from which they are obtained of in personam jurisdiction of the Commission over such entity; provided further, that nothing in this section shall be construed to affect the Commission's access to any records, documents, or other information pursuant to compulsory process or other means.

H. VWoA shall take all necessary legal and equitable action to enforce promptly and in good faith its contractual or other rights to obtain records requested by the Federal Trade Commission pursuant to Paragraph G of Section VII.

I. During the time that Sections I, II, III, IV and V remain in effect, VWoA shall notify the Commission prior to any change in VWoA's corporate structure, such as dissolution, assignment, or sale resulting in the emergence of a successor corporation, the creation or dissolution of subsidiaries, or any other change in the corporation which may affect compliance obligations arising out of this Order.

VIII

It is further ordered that the provisions of this Order shall be limited in their application to the United States.

IX

It is further ordered that the complaint against Volkswagen AG, a corporation, is hereby dismissed.

Analysis of Proposed Consent Order To Aid Public Comment

The Federal Trade Commission has accepted an agreement to a proposed consent order from Volkswagen of America.

The proposed consent order has been placed on the public record for sixty (60) days for reception of comments by interested persons. Comments received during this period will become part of the public record. After sixty (60) days, the Commission will again review the agreement and the comments received and will decide whether it should withdraw from the agreement or make final the agreement's proposed order.

The proposed consent order settles a complaint, issued by the Commission in April 1981, that charged Volkswagen of America and its parent firm, Volkswagen AG, with failing to disclose material product information about various oil-related engine problems to prospective purchasers and owners of 1974-79 Volkswagen and Audi vehicles equipped with water-cooled gasoline engines. The complaint charged that Volkswagen knew or should have known of the conditions that led to the oil-related problems, but failed to disclose them. According to the complaint, the failure to disclose these conditions led to substantial consumer injury and was deceptive and unfair within the meaning of Section 5 of the Federal Trade Commission Act.

The proposed order contains two principal requirements. Volkswagen of America will be required to institute a system of broader and more effective disclosure of product information for its vehicles sold since the beginning of the 1984 model year. Volkswagen of America will also be required to offer arbitration to consumers through an impartial and independent third-party for the oil-related problems in 1974-79 vehicles described in the complaint and for internal engine components for any Volkswagen of Audi vehicle distributed by Volkswagen of America.

The principal requirements are based on similar provisions contained in a previous order the Commission accepted against General Motors Corp. in 1983. General Motors, D. 9145. There are substantial differences, however, between this order and the GM order to account for differences in the facts of the two cases, different corporate structures, and the experience the Commission has had in enforcing the General Motors order.

The product information disclosure program requires that Volkswagen of America make available to the public bulletins that it routinely sends to its dealers. In addition, VWoA must prepare and make available indexes of the bulletins and easy-to-understand summaries of the more significant bulletins. Consumers will learn about existence of the program through a statement placed on the federally mandated retail price and gasoline mileage window sticker placed on each new car, a statement in each owner's manual, and references to the program in brochures and other promotional materials.

The product information program will assist prospective purchasers of new cars in making informed judgments about Volkswagen of America's vehicles. The indexes, bulletins, and summaries will also be useful to owners
of vehicles who want to understand better any problems they are having with their vehicles and who want to use and maintain their cars according to the latest, most accurate recommendations.

The second principal requirement of the order is an arbitration program for resolving complaints concerning engines in Volkswagen of America’s vehicles. The program must be administered by an independent and impartial third-party. Volkswagen presently contemplates that the Council of Better Business Bureaus, Inc. will be the administrator of the program.

There are two parts of the program. Owners and lessees of 1974-79 VWs and Audis with water-cooled gasoline engines will be eligible to arbitrate their claims for repairs caused by excessive oil consumption and engine damage due to lack of lubrication. Consumers will be eligible regardless of whether they still own the car. Volkswagen will be required to notify consumers by first-class mail who have previously complained to the FTC, to Volkswagen or to other third-parties. In addition, there are two “Background Statements” which consumers will receive to assist in pressing their claims. The Background Statements describe in detail the oil-related problems and present opposing views of the FTC and Volkswagen on controverted issues. The Background Statements should prove useful in focusing the issues in arbitrations and in enabling consumers to make effective arguments to arbitrators. The Background Statements will also enable consumers to evaluate the strengths of their cases in deciding whether to accept settlement offers that Volkswagen may make to resolve claims prior to arbitrations.

The program itself, the arbitration program permits owners and lessees of any make or model of Volkswagen or Audi vehicles to arbitrate claims involving internal engine components. Claims under this portion of the program will be handled in much the same way as the oil-related claims discussed above. However, there will not be any Background Statements and the consumer must still own or lease the vehicle at the time the claim is made to the third-party administrator.

For both parts of the arbitration program, the arbitration hearing must be completed within 60 days after the consumer enters the program. The arbitration award is binding on the consumer and Volkswagen only if the consumer decides to accept it. Moreover, the arbitration program is available even if warranty coverage has already expired.

In addition to the direct mail notices required to be sent to consumers for oil-related complaints, Volkswagen of America will be required to place advertisements in national magazines promoting the availability of arbitration, and specifically highlighting the availability of arbitration for certain past claims. VWoA also will be required to distribute posters to its dealers promoting the availability of arbitration. Owner’s manuals for VWoA’s vehicles must also state that arbitration is available to remedy past and future internal engine component complaints.

The arbitration program required by the order should be an effective mechanism for resolving complaints that are covered by the order. The order has been drafted so that the arbitration hearings will be completed expeditiously, simply and fairly. The arbitration program will be free of charge to the consumer for the first two years of the program. After that a charge may be imposed if the BBB’s rules for arbitration are modified. The arbitration program will also save time and expense because consumers will not need a lawyer.

The purpose of this analysis is to facilitate public comment on the proposed order, and it is not intended to constitute an official interpretation of the agreement and proposed order or to modify in any way their terms.

Emily H. Rock,
Secretary.

Concurring Statement of Chairman Daniel Oliver in Volkswagen of America, Inc., Docket No. 8154

The consent order negotiated by the staff contains a number of injunctive relief provisions, and provides consumer redress in the form of a Commission-supervised arbitration process administered by the Better Business Bureau. Although I believe these provisions satisfy the Commission’s concerns in this matter, the negotiated order is not one I would have chosen. However, I am reluctant to suggest order revisions, as they might throw this matter back into the costly litigation which has already consumed many years of Commission resources.

Accordingly, I vote in favor of the staff’s negotiated consent order.

I would have preferred an order without the prospective redress provisions provided in the order’s arbitration mechanism. The negotiated mechanism resolves not only consumer disputes regarding the defects cited in the complaint, but also other internal engine component problems. Although this mechanism is similar to the relief obtained from another automobile manufacturer in a related matter (see General Motors consent order, D-6145), I do not favor its general application, for two reasons.

First, the arbitration mechanism is needlessly regulatory. If Volkswagen wants to negotiate consumer complaints through a Better Business Bureau arbitration scheme, it should certainly be free to do so. However, active government supervision of such a scheme forces government to maintain an active presence in the operation of a domestic auto seller for the next 8 years. Second, to the extent the negotiated order provides prospective redress, it will provide relief primarily to consumers who were not injured by the violations alleged in the complaint. In future consent orders where consumer redress is warranted, I would find it preferable for staff to negotiate for redress that confers benefits on the injured parties.


[FR Doc. 87–6631 Filed 4–10–87; 8:45 am]
WILLING CODE 0750–01–18

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Food and Drug Administration

21 CFR Part 133

[Docket No. 86P–0436]

Mozzarella Cheeses; Proposal To Amend Standards of Identity

AGENCY: Food and Drug Administration.

ACTION: Proposed rule.

SUMMARY: The Food and Drug Administration (FDA) is proposing to amend the standards of identity for mozzarella cheese, low-moisture mozzarella cheese, and, by cross-reference, part-skim mozzarella cheese and low-moisture part-skim mozzarella cheese to provide for the optional use of water buffalo milk. The agency is also proposing to amend the standards to update the format and language and to provide for functional group designations of safe and suitable optional ingredients. This action responds to a petition filed by De Choix Specialty Foods Co. and would promote honesty and fair dealing in the interest of consumers.

DATE: Comments by June 16, 1987. The agency proposes that any final rule that may issue based upon this proposal shall become effective 60 days after date of publication of the final rule in the Federal Register.
I. Water Buffalo Milk

De Choix Specialty Foods Co., 58-25 52nd Ave., Woodside, NY 11377 has submitted a petition to amend the standard of identity for mozzarella cheese (21 CFR 133.155) and, by cross-reference, the standard of identity for part-skim mozzarella cheese (21 CFR 133.157) to provide for the optional use of water buffalo milk in the manufacture of the cheeses. In the interests of consistency, the agency is including the standard for low-moisture part-skim mozzarella cheese (21 CFR 133.156) and, by cross-reference, the standard for low-moisture part-skim mozzarella cheese (21 CFR 133.158) in this action.

The petitioner, an importer of mozzarella cheese made with water buffalo milk, noted that the guidelines used by the U.S. Customs Service for the importation of cheeses into this country list mozzarella cheese made from 100 percent water buffalo milk. The U.S. standards of identity currently provide only for the use of dairy ingredients from cow’s milk in the manufacture of mozzarella cheeses.

The agency recognizes that traditional Italian mozzarella cheese was made from water buffalo milk and later from combinations of water buffalo milk and cow’s milk or cow’s milk alone. When standards for low-moisture mozzarella cheese were established for mozzarella cheeses (July 22, 1961; 26 FR 6599), the standards provided only for the use of cow’s milk.

FDA believes that the petitioner has submitted adequate justification for the proposed amendment of the standards for mozzarella cheeses and that such an amendment would promote honesty and fair dealing in the interest of consumers. Therefore, FDA proposes to amend the standards for mozzarella cheese and scamorza cheese (§ 133.155) and low-moisture mozzarella cheese and scamorza cheese (§ 133.156) and, by cross-reference, the standards for part-skim mozzarella cheese and scamorza cheese (§ 133.157) and low-moisture part-skim mozzarella cheese and scamorza cheese (§ 133.158) to provide for the optional use of water buffalo milk. In addition, the agency is proposing to amend these standards to provide for appropriate labeling, in paragraph (d) of §§ 133.155 and 133.156, when water buffalo milk is used and to update the format of these paragraphs to be consistent with revised standards of identity for other cheeses.

II. Format and Language Changes

The agency is taking this opportunity to propose amendments of §§ 133.155 and 133.156 to make them consistent with the format and language changes made in the nine natural cheese standards revised in consideration of the Codex Alimentarius Recommended International Standards (see 48 FR 2736; January 21, 1983). FDA is specifically proposing to adopt functional group designations for safe and suitable optional ingredients, where appropriate, and to provide for optional forms of milk, nonfat milk, and cream.

FDA believes that adopting the functional group designations will benefit consumers because manufacturers will be permitted to select less expensive or more readily available ingredients which are equally appropriate for a functional purpose. The safety and suitability of ingredients chosen from a functional group are governed by the definition of “safe and suitable” in 21 CFR 130.3(d) in conjunction with appropriate food additive regulations established under 21 CFR Parts 170, 171, and 172. The agency also believes that the use of safe and suitable functional categories will minimize any future need to amend the standards to provide for additional specific ingredients, and the cost benefits resulting from this action will be passed on to the consumer.

Regarding provisions for the use of various forms of milk, nonfat milk, and cream, the agency has concluded that, from a technological standpoint, alternative forms of milk, nonfat milk, and cream, i.e., concentrated, dried, reconstituted forms, can be used to produce the same cheese as that produced from fluid cow’s milk. For consistency, the agency is also providing for alternative forms of water buffalo milk. The agency believes that this action is consistent with the provisions in the existing standards which permit alternative manufacturing procedures as long as they do not adversely affect the physical and chemical properties of the cheese.

III. Related Pending Actions

In the Federal Register of July 19, 1984 (49 FR 26242), FDA published a proposal to amend the regulations for label designation of ingredients ([21 CFR 101.4(b)(22)] to permit enzymes of animal, plant, or microbial origin used in cheese and cheese products to be declared as “enzymes.” Should this proposed change in the labeling regulations become effective before the proposed amendments set out below become effective, the labeling provisions in the proposed amendments will be changed to reference the new 21 CFR 101.4(b)(22).

IV. Economic Impact

In accordance with the Regulatory Flexibility Act (Pub. L. 96-354; 5 U.S.C. 601), FDA has reviewed this proposal to determine its impact on small businesses. The proposal provides for the use of water buffalo milk in the manufacture of mozzarella cheese, low-moisture mozzarella cheese, part-skim mozzarella cheese, and low-moisture part-skim mozzarella cheese. In addition, the proposal provides for amendments which update the format and language and provide for the use of functional groups of optional ingredients in the standards for mozzarella cheese and low-moisture mozzarella cheese, and, by cross-reference, the standards for part-skim mozzarella cheese and low-moisture part-skim mozzarella cheese. The agency believes that this proposal provides increased flexibility to manufacturers of mozzarella cheeses and will not impose an additional burden on the industry. Therefore, FDA certifies that this proposed action will not have a significant economic impact on a substantial number of small entities.

V. Environmental Impact

The agency has determined under 21 CFR 25.24(b)(1) that this action is of a type that does not individually or cumulatively have a significant effect on the human environment. Therefore, neither an environmental assessment nor an environmental impact statement is required.

VI. Comments

Interested persons may, on or before June 16, 1987 submit to the Dockets Management Branch (address above) written comments regarding this proposal. Two copies of any comments are to be submitted, except that individuals may submit one copy. Comments are to be identified with the docket number found in brackets in the heading of this document. Received comments may be seen in the office above between 9 a.m. and 4 p.m., Monday through Friday.

List of Subjects in 21 CFR Part 133

Cheese, Food standards.
Thereupon, under the Federal Food, Drug, and Cosmetic Act and under authority delegated to the Commissioner of Food and Drugs and redelegated to the Director, Center for Food Safety and Applied Nutrition, it is proposed that Part 133 be amended as follows:

PART 133—CHEESES AND RELATED CHEESE PRODUCTS

1. The authority citation for 21 CFR Part 133 continues to read as follows:

2. By revising § 133.155 to read as follows:
§ 133.155 Mozzarella cheese and scamorza cheese.
(a) Description. (1) Mozzarella cheese, scamorza cheese is the food prepared from dairy ingredients and other ingredients specified in this section by the procedure set forth in paragraph (b)(3) of this section, or by any other procedure which produces a finished cheese having the same physical and chemical properties. It may be molded into various shapes. The minimum milkfat content is 45 percent by weight of the solids, and the moisture content is more than 52 percent but not more than 60 percent by weight as determined by the methods described in § 133.5. The dairy ingredients are pasteurized.

(b) The phenol equivalent value of 0.25 gram of mozzarella cheese is not more than 3 micrograms as determined by the method described in § 133.3.

(c) One or more of the dairy ingredients specified in paragraph (b)(1) of this section is added to set the dairy ingredients to a semisolid mass. The mass is cut, and it may be stirred to facilitate separation of whey from the curd. The whey is drained, and the curd may be washed with cold water and the water drained off. The curd may be collected in bundles for further drainage and for ripening. The curd may be rewed, it may be held under refrigeration, and it may be permitted to warm to room temperature and ripen further. The curd may be cut. It is immersed in hot water or heated with steam and is kneaded and stretched until smooth and free of lumps. It is then cut and molded. The molded curd is firm by immersion in cold water and drained. One or more of the other optional ingredients specified in paragraph (b)(3) of this section may be added during the procedure.

(b) Optional ingredients. The following safe and suitable ingredients may be used:
(1) Dairy ingredients. Milk, nonfat milk, or cream, as defined in § 133.3, or the corresponding products of water buffalo origin.
(2) Clotting enzymes. Rennet and/or other clotting enzymes of animal, plant, or microbial origin.
(3) Other optional ingredients. (i) Vinegar. (ii) Coloring to mask any natural yellow color in the curd.
(iii) Salt.
(iv) Antimycotics, the cumulative levels of which shall not exceed current good manufacturing practice, may be added to the cheese during the kneading and stretching process and/or applied to the surface of the cheese.

(c) Nomenclature. The name of the food is "mozzarella cheese" or, alternatively, "scamorza cheese".

(d) Label declaration. The common or usual name of each of the ingredients used in the food shall be declared on the label.

§ 133.156 Low-moisture mozzarella and scamorza cheese.
(a) Description. (1) Low-moisture mozzarella cheese, low-moisture scamorza cheese is the food prepared from dairy ingredients and other ingredients specified in this section by the procedure set forth in paragraph (b)(3) of this section, or by any other procedure which produces a finished cheese having the same physical and chemical properties. It may be molded into various shapes. The minimum milkfat content is 45 percent by weight of the solids and the moisture content is more than 45 percent but not more than 52 percent by weight as determined by the methods described in § 133.5. The dairy ingredients are pasteurized.

(b) The phenol equivalent value of 0.25 gram of low-moisture mozzarella cheese is not more than 3 micrograms as determined by the method described in § 133.3.

(c) One or more of the dairy ingredients specified in paragraph (b)(1) of this section may be warmed and is subjected to the action of a lactic acid-producing bacterial culture. One or more of the clotting enzymes specified in paragraph (b)(2) of this section is added to set the dairy ingredients to a semisolid mass. The mass is cut, stirred, and allowed to stand. It may be reheat and again stirred. The whey is drained and the curd may be cut and piled to promote further separation of whey. It may be washed with cold water and the water drained off. The curd may be collected in bundles for further drainage and for ripening. The curd may be used, it may be held under refrigeration, and it may be permitted to warm to room temperature and ripen further. The curd may be cut. It is immersed in hot water or heated with steam and is kneaded and stretched until smooth and free of lumps. It is then cut and molded. In molding, the curd is kept sufficiently warm to cause proper sealing of the surface. The molded curd is firm by immersion in cold water and drained. One or more of the other optional ingredients specified in paragraph (b)(3) of this section may be added during the procedure.

(b) Optional ingredients. The following safe and suitable ingredients may be used:
(1) Dairy ingredients. Milk, nonfat milk, or cream, as defined in § 133.3, or the corresponding products of water buffalo origin.
(2) Clotting enzymes. Rennet and/or other clotting enzymes of animal, plant, or microbial origin.
(3) Other optional ingredients. (i) Vinegar. (ii) Coloring to mask any natural yellow color in the curd.
(iii) Salt.
(iv) Antimycotics, the cumulative levels of which shall not exceed current good manufacturing practice, may be added to the cheese during the kneading and stretching process and/or applied to the surface of the cheese.

(e) Nomenclature. The name of the food is "low-moisture mozzarella cheese" or, alternatively, "low-moisture scamorza cheese".

(f) Label declaration. The common or usual name of each of the ingredients used in the food shall be declared on the label as required by the applicable
sections of Part 101 of this chapter, except that:

(1) Enzymes of animal, plant, or microbial origin may be declared as "enzymes"; and

(2) The dairy ingredients may be declared, in descending order of predominance, by the use or the terms "milkfat and nonfat milk" or "nonfat milk and milkfat" "milkfat from water buffalo milk and nonfat water buffalo milk" or "nonfat water buffalo milk and milkfat from water buffalo milk" as appropriate.


Richard J. Ronk,
Acting Director, Center for Food Safety and Applied Nutrition.

DEPARTMENT OF LABOR
Occupational Safety and Health Administration


Health and Safety Standards; Manual Lifting

AGENCY: Occupational Safety and Health Administration (OSHA), Labor.

ACTION: Reopening of written comment period and expansion of scope of request for comments and information.

SUMMARY: This notice reopens the comment period concerning OSHA’s request for comments and information on Manual Lifting (51 FR 35241, October 2, 1986), and expands the request to include all categories of workplaces covered by OSHA standards.

DATES: Comments should be received on or before June 30, 1987.


FOR FURTHER INFORMATION CONTACT: Mr. James Foster, Occupational Safety and Health Administration, U.S. Department of Labor, Room N–3670, 200 Constitution Avenue, NW., Washington, DC 20210. Telephone (202) 523–8148.

SUPPLEMENTARY INFORMATION: OSHA published a Request for Comments and Information on manual lifting in general industry (29 CFR Part 1910) on October 2, 1986 (51 FR 35241). Interested persons were given until January 30, 1987 to submit written data, views and information with respect to the issues raised in the notice.

To assure the fullest participation of interested parties, OSHA has decided to reopen the period in which written comments may be submitted on the Request for Comments and Information, and to extend it until June 30, 1987.

OSHA is also expanding the scope of interest of the Request beyond 29 CFR Part 1910, to include all categories of workplaces covered by other OSHA standards, specifically, 29 CFR Parts 1915, 1917 1918, 1919, 1926, and 1928.

Written comments on the issues raised in the October 2, 1986 request for comments and information should be submitted by June 30, 1987 in quadruplicate to the Docket Officer at the address given above. Commenters are requested to provide written submissions that clearly identify the issues and areas which are addressed and the position taken with respect to each issue and area, together with supporting data, where available.

Authority: This document was prepared under the direction of John A. Pendergrass, Assistant Secretary of Labor for Occupational Safety and Health, U.S. Department of Labor, 200 Constitution Avenue, NW., Washington, DC 20210. It is issued under section 6(b) of the Occupational Safety and Health Act of 1970 (29 U.S.C. 655(b)).

Signed at Washington, DC, this 15th day of April, 1987.

John A. Pendergrass,
Assistant Secretary of Labor.

POSTAL SERVICE

39 CFR Part 111

Combined Presort and ZIP + 4 Presort First-Class Mail

AGENCY: Postal Service.

ACTION: Proposed rule.

SUMMARY: This rulemaking proposes to reissue, effective six months from today, the requirement that at least 85 percent of the pieces in a combined Presort and ZIP + 4 Presort First-Class mailing must bear a ZIP + 4 code. This action will terminate the exemption from the minimum ZIP + 4 coding requirement which has been in effect since the ZIP + 4 conversion transition period was initiated in April, 1985.

DATES: Comments must be received on or before May 22, 1987 Proposed effective date: October 18, 1987

ADDRESS: Written comments should be directed to William T. Alvis, Attorney, Classification Division, Office of Postal Rates and Mailing Rules, U.S. Postal Service Headquarters, 475 L’Enfant Plaza West SW., Washington, DC 20280–1141. Copies of all written comments will be available for inspection and photocopying between 9:00 a.m. and 4:00 p.m., Monday through Friday, in the Office of Postal Rates and Mailing Rules, Room 6446, U.S. Postal Service Headquarters, 475 L’Enfant Plaza West SW., Washington, DC.


SUPPLEMENTARY INFORMATION: When the Postal Service published the final implementing rule governing ZIP + 4 First-Class Mail on January 31, 1984 (49 FR 3652–3655), it permitted mailers to combine ZIP + 4 Presort First-Class Mail (bearing a ZIP + 4 code) and regular Presort First-Class Mail (bearing a 5-digit ZIP Code). As part of that rule, the Postal Service added to its regulations a new Domestic Mail Manual (DMM) section 365 authorizing these combined Presort mailings under a number of conditions, including a requirement that at least 85 percent of the pieces in a combined mailing must bear a ZIP + 4 code.

Experience with the ZIP + 4 program during 1984 indicated that mailers were having more difficulties than foreseen in converting their mailing lists to ZIP + 4 code usage. Based on this experience and at the request of many mailers, on February 1, 1985, the Postal Service published a proposed amendment of DMM section 365 addressing combined Presort and ZIP + 4 Presort First-Class mailings. 50 FR 4709–4711. The Postal Service proposed to assist Presort mailers in the conversion of their mailing lists to ZIP + 4 usage by eliminating, for at least a one-year period, the requirement that a minimum percentage of the pieces in a combined Presort and ZIP + 4 Presort mailing include ZIP + 4 codes in their addresses. Many mailers had found it difficult to achieve an 85-percent ZIP + 4 addressing level through conventional computer matching techniques, and these mailers would have been denied the benefits of ZIP + 4 discounts if they undertook the time-consuming efforts to improve addressing quality and to add ZIP + 4 codes to address list entries unmatched by computer. Larger, multi-list mailers and presort service bureaus had found the 85-percent requirement particularly onerous, as they were unable to achieve a sufficient number of simultaneous, high-quality list conversions among their customers or...
constituent originators to achieve an overall 85-percent match rate.

That proposed rule was adopted, effective April 7, 1985 (50 FR 13569–13573), and amended DMM section 395 to provide for a ZIP + 4 conversion transition period to last until at least April 6, 1986. The transition period was designed to permit Presort mailers, including those using presort service bureaus, to maintain their current level of presortation and Presort discounts while converting to ZIP + 4 usage by allowing those mailers to receive ZIP + 4 discounts on any qualified ZIP + 4 portion of a combined mailing, so long as the mailing contained at least 500 pieces addressed with complete ZIP codes.

In the Spring of 1986 the Postal Service determined, based on the requests of both Presort mailers and presort service bureaus, to extend the conversion transition period beyond April 6, 1986 to provide further assistance to mailers engaged in the ZIP + 4 conversion process. On June 16, 1986, the Postal Service adopted an amendment to DMM section 395 extending the exception to the minimum ZIP + 4 coding requirement until at least January 1, 1987 (51 FR 21750–21759).

The Postal Service has recently reviewed the status of the ZIP + 4 and automation programs and has determined that it is appropriate to close out the conversion transition period and re impose a requirement that all combined Presort mailings contain a high percentage of ZIP + 4 coded pieces. The original objective for establishing the conversion transition period, to give Presort mailers a reasonable opportunity to convert to ZIP + 4 usage and bring their mailing lists up to a high ZIP + 4 match rate, has been met. Moreover, continued growth in the automated processing of Presort First-Class Mail would increase the cost of handling the non-ZIP + 4 portions of combined Presort mailings if commingling were not restricted.

The ZIP + 4 conversion transition period, with its exemption from meeting a minimum ZIP + 4 coding requirement, has been in effect for nearly two years. Presort mailers have had abundant notice of the beneficial aspects of the conversion program and have had ample opportunity to take advantage of it. Thus, termination at this time would be fully warranted. However, mailers that have recently made a conversion decision will generally require substantial additional time to reach a high percentage of ZIP + 4 coding. Time is needed for preparation, software development, and contracting for conversion-related services, in addition to the time required for actual matching operations. Then the mailer may also need to make improvements in addressing hygiene and ascertain further ZIP + 4 codes. The Postal Service wants to provide these mailers with a reasonable period of time to complete the conversion process, without the threat of imminent loss of discounts. Thus, this proposed rule gives six months notice of the termination of the conversion transition period to accommodate those mailers who have made conversion commitments but have not completed the conversion process.

Termination of the conversion transition period is also justified for postal operations reasons. As ZIP + 4 mail volume continues to grow, the Postal Service will incur an increasing amount of additional mail handling costs from the rehandling of five-digit pieces in combined Presort mailings. This increase in costs occurs because automated processing of mail that is presorted to five-digit destinations but which does not bear ZIP + 4 codes is of no benefit to the Postal Service. When such five-digit coded mail is included as part of a combined Presort mailing that is processed on automated equipment, it incurs the cost of two unproductive processing steps. In order to contain these costs, the Postal Service has always believed that the percentage of ZIP + 4 pieces in qualifying ZIP + 4 mailings must be at as high a level as reasonably possible while still accommodating the needs and desires of Presort mailers. Therefore, the Postal Service has previously given notice that it would, at the end of the ZIP + 4 conversion transition period, establish a minimum ZIP + 4 addressing level that balances the Postal Service's interest in reducing these unproductive costs with the requirement that the difficulties of list conversion to ZIP + 4 coding not present unwarranted obstacles to mailer participation in the program. In order to hold the unproductive processing costs caused by five-digit coded pieces being included as part of a ZIP + 4 mailing to a reasonable minimum, the Postal Service stated it would base the permanent minimum requirement on mailers' experience with well-maintained lists, using state-of-the-art software. See 50 FR 4709, 4712 (February 1, 1985); 50 FR 13569, 13571 (April 5, 1985).

The Postal Service has already performed that analysis and set a minimum ZIP + 4 coding percentage for mailers using the optional procedures for three-digit sortation of ZIP + 4 Presort Mail set forth in DMM section 386. See 51 FR 3079, 3080–3081 (January 23, 1986); 51 FR 21750, 21755 (June 16, 1986). In that effort the Postal Service examined its manual list conversion experience, surveyed Presort customers about their experience in adding ZIP + 4 codes to address lists, and studied the current state of the ZIP + 4 conversion software market. Based on that, the Postal Service established an 85 percent ZIP + 4 coding minimum for mailers using the optional three-digit sortation procedures.

The Postal Service's experience has been that the 85 percent ZIP + 4 coding requirement is the appropriate minimum level. Thus, the Postal Service intends to establish, at the end of the conversion transition period, the same 85 percent ZIP + 4 addressing minimum for all combined Presort and ZIP + 4 Presort mailings.

The Postal Service is aware that mailers encounter difficulties in achieving high levels of ZIP + 4 coding, and that mail preparation firms face special difficulties by virtue of their role as consolidators of mail. This is why we have provided for a lengthy conversion transition period to aid in dealing with these difficulties. However, because the costs associated with handling the non-ZIP + 4 portions of combined mailings will continue to increase as volumes grow and because optimum automation processing occurs at high ZIP + 4 coding levels, a high but realistically achievable permanent addressing minimum must now be required. Mailers that are in the process of converting are urged to utilize the remaining six months of the transition period for intensified efforts to achieve higher quality addressing and higher levels of ZIP + 4 code utilization in order to continue to qualify for full Presort and ZIP + 4 discounts.

Although exempt from the notice and comment requirements of the Administrative Procedures Act (5 U.S.C. of 553(b), (c)) regarding proposed rulemaking by 39 U.S.C. 410(a), the Postal Service invites public comment on the following proposed amendments to the Domestic Mail Manual, which is incorporated by reference in the Code of Federal Regulations. See 39 CFR 111.1.

List of Subjects in 39 CFR Part 111

Postal Service.

PART 111—[AMENDED]

1. The authority citation for Part 111 is revised to read as follows: Authority: 5 U.S.C. 552(a); 39 U.S.C. 101, 401, 403, 404, 3001–3011, 3201–3219, 3403–3406, 3621, 5001.
PART 365—COMBINED PRESORT MAILINGS

In Part 365, delete current 365.2, renumber 365.3 through 365.5 as 365.2 through 365.4 respectively, then renumber 365.22—365.28 as 365.23—365.27 and add a new 365.22 to read as follows:

365—Combined Presort Mailings

.22 At least 85 percent of the pieces in a combined mailing must bear the correct Zip + 4 code.

An appropriate amendment to 39 CFR 111.3 to reflect these changes will be published if the proposal is adopted.

Fred Eggleston,
Assistant General Counsel Legislative Division.

[FR Doc. 87-8717 Filed 4-1-87; 8:45 am]

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 85

[FRL-3141-3]

Motor Vehicle Emissions Control System Performance Warranty Short Tests—Alternative Quality Control Procedures; State of Maryland

AGENCY: Environmental Protection Agency.

ACTION: Notice of proposed rulemaking; Preliminary determination of equivalency.

SUMMARY: This notice proposes the approval of certain quality control procedures used by the State of Maryland in its emissions inspection/maintenance (I/M) program as equivalent to procedures outlined in §85.2217 of the Emission Control System Performance Warranty Short Tests regulations (40 CFR Part 85, Subpart W). A finding of equivalency of Maryland’s alternative procedures would legitimize the quality control procedures for Performance Warranty purposes, allowing owners of failed vehicles in the Maryland program to claim the intended warranty coverage.

DATE: Written comments must be submitted by May 18, 1987.

ADDRESS: Copies of material relevant to this action are contained in, and written comments should be submitted to, Public Docket No. A-84–30, U.S. Environmental Protection Agency, Central Docket Section, West Tower Lobby, Gallery One, 401 M Street SW., Washington, DC 20460. The docket may be inspected between 8 a.m. and 4 p.m. on weekdays. As provided in 40 CFR Part 2, a reasonable fee may be charged for photocopying.

FOR FURTHER INFORMATION CONTACT: Gay MacGregor, Emission Control Technology Division, Office of Mobile Sources, Environmental Protection Agency, 2505 Plymouth Road, Ann Arbor, Michigan 48105, Telephone: (313) 685–4487

SUPPLEMENTARY INFORMATION:

A. Background

Section 207(b) of the Clean Air Act, 42 U.S.C. 7541(b), requires EPA to establish test procedures for use in determining compliance of in-use motor vehicles with vehicle emissions standards, provided the procedures are available, are consistent with good engineering practices, and are reasonably capable of being correlated with the emissions certification test (or Federal Test Procedure FTP)). EPA is also required to issue regulations requiring manufacturers to warrant the in-use performance of their vehicles’ emission control systems (“performance warranty”) at such time as the facilities and equipment needed to perform the necessary in-use tests described above have become available.

On May 22, 1986, EPA made the necessary findings and established three “short test” procedures (45 FR 34802). These short tests may be used by States as part of their vehicle inspection and maintenance (I/M) programs. On the same date, EPA also published emissions performance warranty regulations (45 FR 34828) to 40 CFR Part 85, Subpart W. The performance warranty regulations cover 1981 and newer model year light-duty vehicles and light-duty trucks whose owners may be subject to any sanction as a result of failing to meet emission standards as determined by an approved short test. The warranty covers vehicles throughout their statutory useful life, if the vehicles were maintained in accordance with the manufacturer’s instructions, but only covers primary emission controls after a vehicle passes two years or 24,000 miles. In §85.2217 the warranty regulations identify specific quality control procedures which must be followed for warranty short tests to be valid for determining potential warranty liability.

EPA recognized in promulgating the original quality control guidelines of the regulations that they reflected the level of accuracy of I/M programs at the time. On June 12, 1984 (49 FR 24320), EPA published amendments to the warranty regulations. In these amendments, provision was made for any State I/M authority to petition the Agency for approval of alternative quality control procedures. Section 85.2206(b) provides that a State may request to use alternative quality control procedures that are equivalent to those required by §85.2217 but the State must provide data and technical support to EPA to substantiate its claim of equivalency. Section 85.2206(b) further requires that, following a preliminary determination that the alternative procedures are equivalent, EPA will publish a notice in the Federal Register announcing the request and explaining EPA’s preliminary determination of equivalency.

Section 85–2206(b) also provides that a 30-day comment period will be allowed for interested parties to review EPA’s preliminary determination. If the comments received do not establish a basis for EPA to conclude that the preliminary determination was in error, a final Federal Register notice will be published establishing the alternative procedures as valid for the purpose of section 207(b) of the Clean Air Act. Vehicles failing I/M tests conducted in accordance with the alternative procedures would then be eligible for the performance warranty remedy (provided other warranty conditions are met).

B. Maryland’s Request

On June 24, 1984, the State of Maryland notified EPA of its intention to petition for an equivalency determination on alternative quality control measures used in the State’s I/M program. Submitted as part of the notification was a request for EPA comment on Maryland’s proposed methodology for demonstrating equivalency. EPA provided written comments on July 12, 1984. On August 6, 1985, the State of Maryland petitioned EPA for an equivalency determination under the alternative quality control subsection of Subpart W (40 CFR 85.2208). Maryland later submitted a revised petition dated September 23, 1985. The revised petition and a subsequent performance audit of the Maryland Vehicle Emission Inspection Program (VEIP) conducted by EPA staff on November 8–21, 1985, serve as the basis for this preliminary determination.

Maryland’s quality control procedures differ from those contained in Subpart W (40 CFR 85.2217) in two ways. First, §85.2217 requires calibration gas checks at least weekly using low-range gas. Maryland uses high-range gas to perform calibration checks on an hourly basis. The Maryland VEIP conducts bi-
weekly multipoint gas calibration checks which include the use of low-range gas. The bi-weekly checks are conducted alternately by the Maryland Department of Health and Mental Hygiene (DHMH) and the VEIP contractor, Systems Control Inc. If DHMH finds the analyzers are out of calibration they are shut down until a service call can be made. The DHMH uses a tolerance of ±3 percent. The program contractor uses a tolerance level of ±1.5 percent and calibrates any analyzer that fails at the time of the check.

Second, § 85.2217 requires weekly leak checks using a comparison of probe and port gas readings. The Maryland VEIP conducts daily leak checks using a vacuum decay method internal to the analyzer.

Maryland petitioned EPA to find its alternative quality control procedures equivalent based on the following assertions: (a) Comparison of quality assurance results in the Maryland VEIP using bi-weekly low-scale gas checks, with a similar program (discussed below) using the weekly low-scale gas checks shows the Maryland results to be at least as good as those obtained in the similar program; (b) data from field audits of the program analyzers show that 95 percent of the analyzers are within ±5 percent of the true calibration gas value; and (c) laboratory tests using Maryland analyzers show that internal vacuum decay leak check procedures are effective in detecting leaks in the analyzer sampling system of 3 percent of the calibration gas concentration.

In its September 23, 1985 petition the State or Maryland provided evidence to substantiate all three assertions. Comparison of 887 low-scale gas audits conducted in the VEIP with data provided by the Washington State Department of Ecology on 2,752 audits conducted in the Seattle inspection/maintenance program showed the Maryland results to be as good as the Seattle results. The Seattle program follows the letter of § 85.2217 performing weekly low-scale checks and probe port leak checks. The analyzers used in Washington are similar to those used in Maryland. Seattle’s analyzers also automatically conduct hourly calibration checks and readjustment to onboard gas values, as Maryland analyzers do; however, the onboard gas is low scale in the Seattle program.

The data submitted by Maryland represented 100 percent of all gas audits conducted in the field by the Department of Health and Mental Hygiene between March 1984 and April 1985. Through the field audit data, Maryland was able to demonstrate that the analyzers used in the Maryland program hold calibration within a 5 percent error tolerance more than 95 percent of the time. In its July 12, 1984 comments on Maryland’s proposed methodology, EPA indicated that if 95 percent of the analyzers checked with low scale gas were shown to be within 5 percent of true gas value, EPA would consider that a more than adequate demonstration of equivalency of quality control procedures.

Maryland also conducted laboratory tests of its leak check procedures by introducing leaks in the sampling system by means of a micro-flow valve on six analyzers. These tests showed that the vacuum leak check procedure internal to the model analyzer used in the Maryland program, the Sun model CEA 3022M, is capable of detecting leaks of 3 percent and less. In fact, the results demonstrated that leaks as small as 1 percent could be detected.

4C. EPA’s Evaluation

In promulgating and warranty regulations, EPA had to address two competing objectives:

1. To provide warranty protection to consumers in all I/M programs; and
2. To protect automobile manufacturers from improper warranty claims.

These two objectives made it necessary for EPA to adopt very specific test procedures and emissions limits for the warranty regulations, as well as specific analyzer specifications and quality control procedures. At the time that the original emission performance warranty regulations were promulgated, most I/M programs used manually-operated, garage-type emissions analyzers of diverse make and model, with calibration and maintenance being primarily the responsibility of the operator. Consequently, § 85.2217 governing quality control procedures was developed with this constraint in mind.

TheVEIP uses advanced state-of-the-art computerized emissions analyzers, that are programmed for automatic testing, automatic data collection, and automatic quality control. In addition to these features, the Maryland analyzers are connected directly to a mainframe computer which allows the program’s contractor to monitor the results of the hourly high scale gas calibrations. If the analyzer drifts out of calibration it automatically locks out. If it appears that a machine is drifting toward the limit of allowable drift (20 ppm or 0.1 percent CO) a technician checks the analyzer. Because of the technological capabilities of the Maryland analyzers and the continuous monitoring of individual analyzers via the computer system, Maryland chose to conduct a less frequent regime of low scale gas calibration checks and to use the vacuum-based leak check procedure internal to the Sun model CEA 3022M instead of the probe/port comparisons required by the warranty regulations.

An important consideration in establishing the quality control procedures in § 85.2217 was to protect the automobile manufacturers from improper warranty claims by minimizing the number of instances where a vehicle improperly failed the I/M test. In this sense, analyzer quality control procedures are important in assuring that analyzers do not yield erroneously high emissions readings, thus causing vehicles to improperly fail the test.

It was this consideration which EPA felt was the most sensitive concern to be evaluated in the review of the Maryland’s alternative quality control procedures. EPA’s review of the field audit data collected in the VEIP indicates that bi-weekly calibration checks using low-range calibration gases showed that 1.6 percent of the analyzers had positive carbon monoxide (CO) errors and 2.5 percent had positive hydrocarbon (HC) errors of + 5 percent of true value.

Although high-emitting vehicles which receive erroneously low emission readings (and whose owners are therefore not subject to any sanction by the State) do not cause vehicle manufacturers any warranty expense, EPA is sensitive to such occurrences. The quality control requirements of the warranty short test regulations serve as a benchmark for all I/M programs. The purpose of any I/M program is to improve air quality through repair of high-emitting vehicles. This purpose is defeated if a large number of vehicles escape repair because of quality control procedures which result in negative errors. If too many vehicles escape repair, a test method and its associated quality control procedures cannot be considered to meet the statutory requirement of being in accordance with good engineering practices. The data submitted by Maryland and bi-weekly low scale gas calibration checks showed 3.2 percent of the analyzers had negative CO errors and 0.8 percent had negative HC errors.

EPA believes that Maryland’s laboratory tests demonstrate the adequacy of its vacuum leak check procedures to detect leaks of less than 3 percent. Therefore, EPA believes that...
Maryland's vacuum-based leak check procedure satisfies the statutory criterion of being in accordance with good engineering practices and is equivalent to the leak check procedure specified in § 85.2217. Moreover, in the EPA audit of the Maryland Program, none of the analyzers checked was out of calibration when tested with low-scale gas. In addition, review of the computer records of gas audits conducted monthly by the State DHMH show only one analyzer out of calibration between February 1985 and November 1985. In light of these low error rates and performance data, EPA feels that 1981 and newer vehicles being failed in Maryland's I/M program are not being failed improperly due to the quality control procedures and should be eligible for warranty protection.

D. EPA's Preliminary Determination

The quality control procedures in § 85.2217 of the warranty short test regulations have been determined by the Administrator to meet the statutory criteria of being readily available, in accordance with good engineering practices, and resulting in the short tests being reasonably capable of being correlated with the FTP (see 45 FR 34802). In the case of Maryland's alternative quality control procedures, since they are currently being used, it is clear that these procedures meet the first criterion of being readily available.

Maryland's alternative quality control procedures differ from 207(b) procedures in two ways. The gas calibration check is done bi-weekly using high-scale rather than low-scale calibration gases, and the leak check procedure is vacuum based. Compensating for these differences is the fact that all of the analyzers used in the Maryland program are the same model, the Sun CEA 3022M, and are linked by direct line to a central processing unit enabling detailed monitoring of individual analyzer performance. In addition, Maryland's quality control program includes periodic hourly high scale gas calibration checks and daily leak checks. Despite the use of high scale gas, this is a more stringent schedule than the regulations require. Data submitted by DHMH and performance data collected by EPA in its program audit substantiate that the automated features of the Sun CEA 3022M, combined with Maryland's computer monitoring of reports on analyzer performance, result in a high degree of overall system reliability and accuracy. Therefore, it is EPA's determination that these procedures are in accordance with good engineering practices and do not reduce the ability of the short test to be correlated with the FTP.

Based on the evaluation discussed above, this notice announces EPA's preliminary determination that the alternative quality control procedures being used in the Maryland I/M program are equivalent to those required in § 85.2217.

E. Request for Comment

EPA is soliciting comment on its preliminary determination that Maryland's alternative quality control procedures are equivalent to those required by § 85.2217. All comments should be received within 30 days of the publication of this notice, by May 18, 1987.

After the close of the comment period, EPA will evaluate all comments received. If these comments do not establish a basis for EPA to conclude that the preliminary determination is in error, a final Federal Register notice will be published granting the State of Maryland permission to use the alternative procedures in its I/M program thus providing continued performance warranty coverage.

F. Administrative

This notice has been exempted from review by the Office of Management and Budget under Executive Order 12291. In addition, since this notice does not meet any of the criteria for classifications as a "major rule" under Executive Order 12291, no regulatory impact analysis is required.

Pursuant to section 3(a) of the Regulatory Flexibility Act, 5 U.S.C. 601 et seq., I certify that this notice will not have a significant impact on a substantial number of small entities. The only entities potentially adversely affected by this notice would be motor vehicle manufacturers whose performance warranty liability in Maryland might be affected. However, these manufacturers are not small entities. Thus, no regulatory flexibility analysis is required.

List of Subjects

40 CFR Part 85

[AIR-3141-2]

Motor Vehicle Emission Control System Performance Warranty Short Tests—Alternative Quality Control Procedures; State of New York

AGENCY: Environmental Protection Agency.

ACTION: Notice of proposed rulemaking: Preliminary determination of equivalency.

SUMMARY: This notice proposes the approval of certain quality control procedures used by the State of New York in its emissions inspection/maintenance program as equivalent to procedures outlined in § 85.2217 of the Emission Control System Performance Warranty Short Tests regulations (40 CFR Part 85, subpart W). A finding of equivalency of New York's alternative procedures would legitimize the quality control procedures for Performance Warranty purposes, allowing owners of failed vehicles in the New York program to claim the intended warranty coverage. EPA is providing a 30-day comment period on this preliminary determination.

DATE: Written comments must be submitted by Mary 18, 1987

ADDRESS: Copies of material relevant to this action are contained in, and written comments should be submitted to, Public Docket No. A-84-30, U.S. Environmental Protection Agency, Central Docket Section, West Tower Lobby, Gallery One, 401 M Street SW., Washington, DC 20460. The docket may be inspected between 8 a.m. and 4 p.m. on weekdays. As provided in 40 CFR Part 2, a reasonable fee may be charged for photocopying.

FOR FURTHER INFORMATION CONTACT:
Gay MacGregor, Emission Control Technology Division, Office of Mobile Sources, Environmental Protection Agency, 2585 Plymouth Road, Ann Arbor, Michigan 48105, Telephone: (313) 868-4487

SUPPLEMENTARY INFORMATION:

A. Background

Section 207(b) of the Clean Air Act, 42 U.S.C. 7541(b), requires EPA to establish test procedures for use in determining compliance of in-use motor vehicles with vehicle emissions standards, provided the procedures are available, are consistent with good engineering practices, and are reasonably capable of being correlated with the emissions certification test (or Federal Test Procedure (FTP)). EPA is also required...
to issue regulations requiring manufacturers to warrant the in-use performance of their vehicles' emission control systems ("performance warranty") at such time as the facilities and equipment needed to perform the necessary in-use tests described above have become available.

On May 22, 1986, EPA also made the necessary findings and established three "short test" procedures (45 FR 34820). These short tests may be used by States as part of their vehicle inspection and maintenance (I/M) programs. On the same date, EPA also published emission performance warranty regulations (45 FR 34829) 40 CFR Part 85. These short tests may be used by States as part of their vehicle inspection and maintenance (I/M) programs. On the same date, EPA also published emission performance warranty regulations (45 FR 34829) 40 CFR Part 85, Subpart W. The performance warranty regulations cover 1981 and newer model year light-duty vehicles and light-duty trucks whose owners may be subject to any sanction as a result of failing to meet emissions standards as determined by an approved short test. The warranty covers vehicles throughout their statutory useful life, if the vehicles were maintained in accordance with the manufacturer's instructions, but only covers primary emission controls after a vehicle passes two years or 24,000 miles. In § 85.2217, the warranty regulations identify specific quality control procedures which must be followed for warranty short tests to be valid for determining potential warranty liability.

EPA recognized in promulgating the original quality control guidelines of the regulations that they reflected the level of accuracy of I/M programs at the time. On June 12, 1984 (49 FR 24320), EPA published amendments to the warranty regulations. In these amendments, provision was made for any State I/M authority to petition the Agency for approval of alternative quality control procedures. Section 85.2208(b) provides that a State may request to use alternative quality control procedures that are equivalent to those required by § 85.2217 but that the State must provide data and technical support to EPA to substantiate its claim of equivalency. Section 85.2208(b) further requires that, following a preliminary determination that the alternative procedures are equivalent, EPA will publish a notice in the Federal Register announcing the request and explaining EPA's preliminary determination of equivalency. In addition, a 30-day comment period must be allowed for interested parties to review EPA's preliminary determination. If the comments received do not establish a basis for EPA to conclude that the preliminary determination was in error, a final Federal Register notice will be published establishing the alternative procedures as valid for the purposes of section 207(b) of the Clean Air Act. Vehicles failing I/M tests conducted in accordance with the alternative procedures would then be eligible for warranty remedy (provided other warranty conditions are met).

B. New York State's Request

On March 3, 1982, the New York State Department of Environmental Conservation (NYSDEC) submitted a request for approval of alternative quality control procedures used in its I/M program. As explained in the NYSDEC submittal, New York's quality control procedures differ in several ways from the procedures required in § 85.2217 but the State maintains that its procedures are at least as effective as those required by the regulations. First, New York performs monthly calibration gas checks, while § 85.2217 requires gas checks at least weekly. Second, New York uses calibration gases with high-range concentrations while the regulations require low-range concentration gases. At the time of the request, New York used a monthly vacuum-based leak check procedure rather than the weekly probe/port leak check required by the regulations. It also gas checked analyzers only through the port and not through the sampling probe. In 1985, subsequent to the original request, New York modified its procedures to include probe/port comparison leak checks and analyzer calibration gas checks through the sampling probe.

New York petitioned EPA to find its alternative quality control procedures to be equivalent to § 85.2217 based on the assertion that its analyzers have computerized quality control features, unlike the analyzers generally available at the time the warranty regulations were developed. All I/M tests in New York are performed with a single model analyzer, the Hamilton Test Systems (HTS) CVIS Model 9000. This type of analyzer performs automatic zero and span checks before each test and automatically records test results on cassette tapes. All licensed I/M inspection stations in New York must maintain a service contract with Hamilton test systems-New York (HTS-NY) for prepaid monthly and prompt on-call maintenance of the analyzers. Finally, the analyzers in New York will not accept as valid any test in which the measured carbon monoxide plus carbon dioxide concentration contest is less than 6 percent, which has the effect of preventing testing if there are very severe exhaust system or analyzer leaks.

On August 12, 1982, EPA responded by letter to NYSDEC regarding the March 3, 1982 submittal. EPA's response pointed out that NYSDEC had provided sufficient data to substantiate that the use of high-range calibration gases adequately ensures low-scale accuracy in the Hamilton CVIS Model 9000 analyzers. However, EPA's response also pointed out that more data were needed to substantiate the use of the monthly calibration frequency and vacuum leak check procedures in New York.

On March 4, 1983, NYSDEC submitted a proposed sampling and test protocol for an audit of the New York I/M program in order to collect the additional data needed to substantiate its request. NYSDEC conducted its field performance audit during August and September of 1983.

On October 18, 1983, representatives of NYSDEC, EPA, New York State Department of Motor Vehicles and Hamilton Test Systems-New York met to discuss the preliminary results of NYSDEC's audit and other information relevant to New York's request. At this meeting, NYSDEC officials explained that the preliminary results of the audit were favorable regarding the monthly calibration frequency issue, but NYSDEC recognized the need to give more attention to leak detection in its program.

The HTS-NY officials outlined the procedures followed by their personnel during monthly service visits when routine calibration checks and preventive maintenance activities are undertaken. HTS-NY officials also reviewed the results of special studies that had been performed by HTS-NY at the request of NYSDEC. In one study, HTS-NY collected data to verify that using high-range calibration gases in New York analyzers adequately ensures low-range and mid-range analyzer accuracy. Other data verified that a high percentage of HTS-NY analyzers maintain calibration between monthly visits.

On February 3, 1984, NYSDEC submitted the additional data requested by EPA. This submittal included the final results of the field audits supported by information from HTS-NY, statistical analyses performed by NYSDEC, and information of NYSDEC's review of problems with leak detection. As a result of several questions raised by EPA, additional clarifying information was submitted by NYSDEC on April 5, 1984, regarding calibration errors that could result from the use of high-range calibration gases under New York's procedures. On April 10, 1985, the State
of New York notified EPA of its intent to modify its procedures to include probe/port comparison leak checks; this would help reduce the problem of potential errors in obtaining accurate readings at the low end of the analyzer scale. On May 24, 1985, the State of New York provided EPA's Region 2 office with copies of Hamilton Test Systems Service Information Circulars advising analyzer servicing personnel of the changed procedures. The revised procedures went into effect June 3, 1985.

Copies of New York's submittals, EPA correspondence, and other relevant documents, including a Society of Automotive Engineers technical paper evaluating analyzer measurement error using data from the N.Y. I/M program, are available for public inspection and copying in Public Docket A–84–30, Central Docket Section, West Tower Lobby, Gallery One, 401 M Street, SW., Washington DC 20460.

C. EPA's Evaluation

In promulgating the warranty regulations, EPA had to address two competing objectives:

1. To provide warranty protection to consumers in all I/M programs; and
2. To protect automobile manufacturers from unfair warranty claims.

These two objectives made it necessary for EPA to adopt very specific test procedures and emission limits for the warranty regulations as well as specific analyzer specifications and quality control procedures. At the time that the original emission performance warranty regulations were promulgated, the basic state-of-the-art for a decentralized I/M program, like New York's, was the use of manually-operated, garage-type emissions analyzers of diverse make and model, with calibration and maintenance being primarily the responsibility of the operator. Consequently, § 85.2217 governing quality control procedures was developed with this constraint in mind.

Starting in 1981 with the New York I/M program, a new state-of-the-art began to emerge in decentralized I/M programs. This advance was the computerized emissions analyzer. By that time, microprocessor technology had advanced to the extent that garage-type analyzers could be programmed for automatic testing, automatic data collection and, to some extent, automatic quality control. In addition to these features, the New York analyzer also employed the most up-to-date emissions measurement technology by incorporating the performance specifications of the BAR–80 specifications (i.e., analyzer specifications adopted by the California Bureau of Automotive Repair in 1979).

Because of the New York analyzer's advanced technological capabilities, NYSDEC decided to adopt less stringent quality control procedures than those traditionally needed in decentralized I/M programs. These differences created the inconsistencies discussed above between the New York I/M program and the warranty regulations and caused NYSDEC to request approval of alternative quality control procedures.

Computerized emissions analyzer technology has continued to advance to the extent where now virtually all quality control checks, including weekly gas calibrations and leak checks, can be automatically performed by current computerized analyzers. These advances have allowed other States using the most advanced computerized analyzers to avoid inconsistencies with respect to § 85.2217 of the warranty regulations.

An important consideration in establishing the quality control procedures in § 85.2217 was to protect the automobile manufacturers from improper warranty claims by minimizing the number of instances where a vehicle improperly failed the I/M test. In this sense, analyzer quality control procedures are important in assuring that analyzers do not yield erroneously high emissions readings, thus causing vehicles to improperly fail the test.

It was thus considered which EPA felt was the most sensitive concern to be evaluated in the review of the New York situation. EPA's review of the field audit data collected by NYSDEC indicates that monthly calibration and the use of high-range calibration gases results in relatively few analyzers with positive errors on the low-range of the analyzer scale. In the field audit, NYSDEC found that 2.5 percent of the 201 analyzers tested exceeded a 0.1 percent carbon monoxide (CO) positive error and 2.5 percent of the analyzers exceeded a 25 ppm hydrocarbon (HC) (as hexane) positive error when tested with a calibration gas with concentrations of 1.6 percent CO and 320 ppm HC (propane). These values do not include the data from four grossly leaking analyzers which produced invalid test results (CO + CO₂ content less than 6 percent). The tolerances used to analyze negative errors (0.15 percent CO and 20 ppm HC) are somewhat different than the tolerances used to analyze positive errors (0.10 percent CO and 25 ppm HC). Tolerances were chosen based on a consideration of errors resulting from analyzer accuracy, gas-naming accuracy, leaks and residual hydrocarbons in the analyzer sampling system (hydrocarbon hang-up).

The different tolerances for negative versus positive errors were due to the different magnitudes of negative bias errors (leaks) and positive bias errors (hydrocarbon hang-up). An analysis of more severe negative errors shows that 4.0 percent of the analyzers exceeded a 0.25 percent CO negative error and 3.5 percent exceeded a 30 ppm HC (as hexane) negative error.

EPA initially believed that, due to excessive negative error rates, New
York’s monthly vacuum-based leak check procedure did not satisfy the statutory criteria of being in accordance with good engineering practices and was not equivalent to the quality control procedures specified in § 85.2217. However, New York agreed that these error rates were undesirable and has changed its procedures to include weekly probe/port comparison leak checks, effective June 3, 1985. This change is consistent with the procedure specified in § 85.2217(d).

D. EPA’s Preliminary Determination

The quality control procedures in § 85.2217 of the warranty short test regulations have been determined by the Administrator to meet the statutory criteria of being readily available, in accordance with good engineering practices, and resulting in the short tests being reasonably capable of being correlated with the FTP (see 46 FR 34602). In the case of New York’s alternative quality control procedures, since they are currently being used, it is clear that these procedures meet the first criterion of being readily available. After revisions to New York’s quality control procedures to include probe/port comparison leak checks and analyzer calibration gas checks through the sampling probe, New York’s alternative quality control procedures differ from § 85.2217 in two ways. The gas calibration check is done monthly, not weekly, and the State uses high-scale rather than low-scale calibration gases. Compensating for these differences is the fact that all of the analyzers used in the New York program are the same model, the Hamilton CVIS Model 900. The Model 9000 is a BAR-80 analyzer which does not allow the operator to readjust the analyzer between monthly calibration checks. It also compensates for internal electronic drift in zero and span points. The Model 900 also includes a feature which prevents testing if it is not properly warmed up or if the CO + CO₂ content of the sample flow is less than 6 percent.

In addition, New York’s quality control program includes periodic State audits, and monthly calibration gas checks and preventive maintenance checks by HITS-NY personnel. The data and supporting documents submitted by NYSDEC substantiate that the automated features of the Model 9000, combined with New York’s revised quality control program (which includes probe/port comparison leak checks), result in a high degree of overall system reliability and accuracy. Therefore, it is EPA’s preliminary determination that these procedures meet the criterion of being in accordance with good engineering practices.

Based on the evaluation discussed above, this notice announces EPA’s preliminary determination that the alternative quality control procedures are equivalent to those required in § 85.2217. All comments will be received within 30 days of the publication of this notice, by May 19, 1987.

E. Request for Comment

EPA is soliciting comment on its preliminary determination that New York’s alternative quality control procedures are equivalent to those required by § 85.2217. All comments will be published granting New York State permission to use the alternative procedures in its I/M program, thus providing continued performance warranty coverage.

F. Administrative

This notice has been exempted from review by the Office of Management and Budget under Executive Order 12291. In addition, this notice does not meet any of the criteria for classification as a “major rule,” as defined by section 1(a) of Executive Order 12291. Thus, no regulatory impact analysis is required and none has been prepared.

Pursuant to section 3(a) of the Regulatory Flexibility Act, 5 U.S.C. 601 et seq., I hereby certify that this notice will not have a significant adverse impact on a substantial number of small entities. The only entities potentially affected by a final determination of equivalency are automobile manufacturers whose performance warranty liability may be affected. However, these manufacturers are not small entities. Thus, no regulatory flexibility analysis is required and none has been prepared.

List of Subjects in 40 CFR Part 85

Imports, Labeling, Motor vehicle pollution, Reporting and record keeping requirements, Research Warrants.

Authority: Section 207 301(a), Clean Air Act as amended (42 U.S.C. 7541 and 7601[a]).


Lee M. Thomas,
Administrator.

[FR Doc. 87–8677 Filed 4–16–87; 8:45 am]
BILLING CODE 6560–50–M

40 CFR Parts 264 and 265

[FRL–3188–1]

Hazardous Waste Management System; Minimum Technology Requirements

AGENCY: Environmental Protection Agency.

ACTION: Notice of availability of information and request for comments.

SUMMARY: On March 28, 1987, EPA proposed regulations implementing the minimum technology requirements specified in the Hazardous and Solid Waste Amendments of 1984 (HSWA). The proposal included provisions to implement the statutory requirement for double liners and leachate collection systems. Subsequent to the proposal, the Agency gathered data characterizing and comparing the performance of compacted soil and composite bottom liners. EPA announces today the availability of such data. EPA is also making available today two draft guidance documents that contain detailed technical guidance for the design, construction, and operation of single and double liner and leachate collection systems. EPA is requesting comments on this new data and the guidance documents.

DATE: Comments must be submitted on or before June 1, 1987

ADDRESS: Comments should be addressed to the Docket Clerk at the following address: EPA RCRA Docket [5–212] [WH–582], 401 M Street, SW., Washington, DC 20460. One original and two copies should be sent and identified by regulatory docket reference code F–87–DLRN–FFFFF. The Docket is open from 9:30 a.m. to 3:30 p.m. Monday through Friday, except for Federal holidays. The public must make an appointment to review docket materials and should call Mia Zmud at (302) 475–9327 for appointments. The public may copy at no cost a maximum of 50 pages of material for any one regulatory docket. Additional copies are $0.20 per page.

A limited number of copies of the following documents are available for public distribution through Kenneth Skahn, in the Office of Solid Waste, U.S. Environmental Protection Agency at the
Draft Minimum Technology Guidance

on Single Liner Systems for Landfills,
Surface Impoundments, and Waste
Piles—Design, Construction, and
Operation [EPA/530-SW-85-013];
Draft Minimum Technology Guidance
on Double Liner Systems for Landfills
and Surface Impoundments—Design,
Construction, and Operation [EPA/
530-SW-85-014]; and
Background Document on Bottom liner
Performance in Double-Lined
Landfills and Surface Impoundments
[EPA/530-SW-87-013].

In addition, copies of the background
document are available for review in the
Office of Solid Waste (OSW) docket
room.

For further information contact:
Karren Skahn, Office of Solid Waste,
Washington, DC 20460, (202)
382-4654.

The Hazardous and Solid Waste
Amendments (HSWA) of 1984, require
that certain landfills and surface
impoundments must have two or more
liners and a leachate collection system.
Specifically, section 3004(o)(1)(A) of
RCRA, as amended by HSWA, requires
new landfills or surface impoundments,
each new landfill or surface
impoundment unit at existing facilities, and
each lateral expansion or
replacement of a landfill or surface
impoundment unit at existing facilities
(for which a permit is received after
November 8, 1984) to have at least two
liners and a leachate collection system
above (for landfills) and between such
liners (i.e., double-liner minimum
technology requirements). Section
3015(b) of RCRA extends the
double-liner and leachate collection system
requirements of section 3004(o)(1)(A) to new
units, replacement units and lateral expansion of existing units at interim
status landfills and surface
impoundments that are within the waste
management area identified in the permit
application with respect to wastes
received beginning May 8, 1985.

Therefore, certain landfills or surface
impoundments must meet the double-
liner minimum technology
requirements of section 3004(o)(1)(A),
unless they qualify for an exemption
under sections 3004(o), 3005(j). Under
section 3004(o)(5)(A), EPA is required to
issue regulations or technical guidance
by November 8, 1986, implementing the
requirements of section 3004(o)(1)(A).

In addition, section 3015(a) of RCRA
requires new units, replacements and
lateral expansions of interim status
waste piles to comply with the single
liner and leachate collection and
removal system requirements with
respect to waste received beginning
May 8, 1985. The requirements for waste
piles in units in 40 CFR 264.251(a) and
265.254 and the draft technical guidance
for single liners cited above, provide
standards and guidelines for design,
construction, and operation of these
single-lined units.

Until EPA issues new regulations or
guidance on liners and leachate
collection systems in accordance with
section 3004(o)(5), double liner systems
may be designed, constructed, and
installed according to the interim
statutory provisions of RCRA, section
3004(o)(5)(B), that were codified on July
15, 1985 (50 FR 28702), in 40 CFR
264.221(c), 264.301(c), 265.221(a), and
265.301(a). These interim standards
require that the top and bottom liners be
designed, operated, and constructed of
materials to prevent hazardous
constituent migration during the active
life and post-closure care period for the
unit. In the preamble to the July 15, 1985,
regulation (50 FR 28702), the Agency
states that the top liner standard can be
met by a flexible membrane liner (FML).

According to RCRA section
3004(o)(5)(B), the bottom liner must be
constructed of at least three feet of
recompacted soil or other natural
materials with a permeability of no
more than 1 x 10\(^{-7}\) cm/sec.

In addition to double liner and
leachate collection system requirements,
the minimum technological
requirements under section 3004(o)(4) of
RCRA, as amended by HSWA, call for the
utilization of an approved leak
detection system (LDS) for new landfills,
surface impoundments, waste piles,
underground tanks, and land treatment
units. This LDS must be able to detect
leakage of hazardous constituents at the
earliest practicable time. Section
3004(c)(4)(A) requires EPA to promulgate standards for the LDS no

On March 28, 1986, EPA proposed
amendments to the interim statutory
provisions for double liners under the
authority of section 3004(o)(3)(A). This
proposal set forth alternative
performance standards for double liner
systems (51 FR 10707-10711).

Under the first alternative, the
proposal requires a liner system to
include both top and bottom liners
designed, operated, and constructed of
materials to prevent hazardous
constituent migration during the active
life and post-closure care period (40 CFR
Part 284.221(c)). To meet this standard,
the top liner must be an FML (51 FR
10709). The proposal provides that the
bottom liner performance standard may
be met by a liner constructed of at least
a 3 foot layer of compacted soil or other
natural materials with a maximum
hydraulic conductivity of no more than
1 x 10\(^{-7}\) cm/sec (40 CFR 284.221(c)).

Under the second alternative
proposed on March 28, 1986, the liner
system must include a top liner meeting
the same performance standard that is
described for the first alternative. The
bottom liner must consist of two
components that are intended to function as one liner. The upper
component of the double composite liner must be designed, operated, and constructed of
materials to prevent hazardous
correspondent migration through this
component during the active life and
post-closure care period. The lower
component must be designed, operated, and constructed of
materials to minimize hazardous
correspondent migration through the upper
component if a breach in the upper
correspondent occurs before the end of the
post-closure care period. The lower
component must be constructed of
recompacted soil or other natural
materials with a hydraulic conductivity of no more than
1 x 10\(^{-7}\) cm/sec. In the preamble, we note
that the composite liner should consist of a FML and a compacted soil
component at least 3 feet (90 cm) thick
(51 FR 10710).

Based on data available at the time of
the proposal, EPA believed that both
these systems could meet the overall
double liner system goal of preventing
hazardous constituent migration out of
the unit during the active life and post-
closure care period for the facility.
However, in the preamble EPA
expressed some concern about the long-
term performance of the compacted soil
bottom liner (51 FR 10709), noting that if
leachate migrates through a breach in the
top FML liner, the leachate may be
trapped in the compacted low
permeability soil liner rather than be
collected and removed in the leachate
collection system between the liners.

EPA will soon be proposing
regulations for an approved leak
detection system (LDS) at newly
constructed units to meet the statutory
provisions in section 3004(o)(4)(A).
EPA’s current position is that the
leachate collection and removal system
(LCRS) proposed on March 28, 1988
New Data

The Agency is reviewing data that are currently available from modeling efforts, actual performance and technical engineering analyses that compare the performance of these two bottom liners with respect to the following parameters:

- Leachate collection efficiency:
- Leak detection capability; and
- Leakage, both into and out of, the bottom liner.

EPA believes that any one of these factors will significantly influence the performance of the bottom liner, and, therefore, may influence EPA's final decision concerning the composition of the bottom liner.

Today, EPA is making this information available for public comment. The data are presented and discussed in detail in a background document for this notice and will be considered along with other relevant information provided by the public in the development of the final double liner rule. The background document is entitled, "Background Document on Bottom Liner Performance in Double-Lined Landfills and Surface Impoundments."

1. Background

Compact soil liners have long been used as barriers and foundations in traditional civil engineering structures, such as dams, canals, and highways. They, therefore, have a long record of performance. Although they may be effective, in some instances they have not performed as efficiently, as well as leak detection sensitivity, as liquid barrier systems with a hydraulic conductivity and, hence, have a detrimental effect on the liner's performance. Even under a good construction quality assurance program, FML's may have up to 1 or 2 small holes per acre of liner, based on engineering analysis of the current technology.

On the other hand, a composite liner consisting of a FML upper component and compacted low permeability soil lower component has several advantages and combines the strengths and capabilities of both materials to maximize leachate collection, collection, and removal from the unit. The FML upper component improves by itself the leachate collection and removal efficiency and leak detection sensitivity of the LDCRS. In addition, the soil component minimizes the migration of liquids that leak through holes in the FML and provide some attenuation of leakage. As discussed more specifically below, EPA's analysis shows that the composite bottom liner system would provide better leak detection sensitivity and leachate collection and removal efficiency than a compacted low permeability soil. It would also significantly reduce the amount of leakage into the bottom liner and out of the unit over time as a result of increased leachate collection and removal efficiency. Therefore, a well constructed, maintained, and operated composite liner is expected to minimize...
hazardous constituent migration out of the unit by maximizing leachate collection and removal.

2. Engineering Analysis of Performance Data

In order to analyze the performance capabilities of the two bottom liner systems, the Agency reviewed available performance data for compacted soil and flexible membrane liners from actual landfills and surface impoundments. (Actual performance data on composite bottom lines does not exist at this time.) The review of such data indicates that as a general matter, compacted soil liners do not have uniform hydraulic properties across and through the liner. FMLs, on the other hand, possess uniform hydraulic properties. The range of actual performance data for compacted soil and flexible membrane liners was used in the Agency’s modeling analysis to provide an understanding of the leak detection sensitivity and leachate collection efficiency of the bottom liners. (See section 3 below.) The background document more fully addresses the performance capabilities of the two bottom liner systems.

In addition, EPA recently conducted a review of applications submitted for RCRA hazardous waste facility permits since November 8, 1984, to determine the type bottom liner selected for installation at new landfills and surface impoundments. Of some 183 units for which permit applications were submitted as of February 1987 only seven units were to be constructed with compacted low permeability soil bottom liners. The vast majority of owners or operators selected the composite bottom liner rather than a compacted low-permeability soil liner. Many owners or operators have also indicated that they plan to use a composite liner for the top liner as well.

3. Analytical Data

Because only limited field data exist, analytical and numerical modeling approaches have been developed and used by EPA to evaluate the performance capabilities of the two bottom liners at a typical landfill or surface impoundment unit.

Three modeling approaches were used to evaluate leachate collection efficiency, leak detection sensitivity, and leakage into and out of the bottom liner:

* steady-state, saturated, 1-dimensional flow;
* transient, unsaturated, 1-dimensional flow; and
* transient, unsaturated, 2-dimensional flow.

These approaches reflect three different levels of analysis for evaluating the performance of the bottom liner. The results from each analysis were compared and in some cases aggregated in order to determine the representative values for leachate collection efficiency, leak detection sensitivity, and migration into and out of the bottom liner. A detailed discussion of each modeling effort is presented in the background document. Figures presented in this notice are derived from the modeling efforts described in the background document. Today’s notice does not contain a complete discussion of the applications of each approach to each performance parameter. Such discussion is, however, set forth in the background document.

The detection sensitivity is the smallest leakage rate through the top FML that can be detected in the LDCRS sump. For the compacted low permeability soil liner at 1 x 10^-7 cm/sec, the smallest leakage rate detected is about 80-100 gallons per acre per day (gpad) with a uniformly leaking FML top liner, based on the 1-dimensional saturated flow calculations (Figure 1). The actual capability of a compacted soil liner is site-specific and will depend on many factors (e.g., location of the leak, effective hydraulic conductivity of the liner, and the design of the LDCRS between the liners). However, as a general matter a bottom liner of compacted soil with a hydraulic conductivity value of 1 x 10^-6 cm/sec will perform significantly worse. For a composite liner, the LDCRS can detect leakage rates several orders of magnitude smaller than 80 gpad, i.e., 1 gpad. Even with a few holes in the FML component, the composite liner still performs much better than compacted soil liners with respect to leak detection sensitivity.
LEAK DETECTION SENSITIVITY

Figure 1. Comparison of leak detection sensitivity for compacted soil and composite bottom liners.

BILLING CODE 6580-50-C
The leachate collection efficiency is the maximum possible leakage that can be collected in the LDCRS sump divided by the total leakage entering the LDCRS through the liner. Figure 2 illustrates the relative collection efficiencies of the composite and compacted low permeability soil liner systems assuming uniform top liner leakage and steady-state, 1-dimensional flow. Both systems have greater than 90 percent collection efficiency at very large leakage rates (greater than 1000 gpad); at smaller leakage rates that EPA believes are more representative of current technology and operating practices at landfills and surface impoundments (e.g., 10–100 gpad), the compacted low permeability soil liners have near zero percent efficiencies while the composite liner has near 100% efficiency. Figure 2 also demonstrates the significant reduction in collection efficiency with an increase in hydraulic conductivity for the compacted low permeability soil liner. Increasing the number of defects (holes) the FML component of the composite liner reduces the collection efficiency only slightly. Calculated cumulative leachate collection efficiencies over 10 years at a constant leakage rate of 100 gpad (e.g., rates that can be expected to be observed in surface impoundment failures given the large volume and depth of liquid present) indicate that (1) composite liners achieve a much greater leakage collection efficiency than compacted soil bottom liners, and (2) for compacted soil bottom liners an increase in hydraulic conductivity of the soils (to $1 \times 10^{-6}$ cm/sec) produces a significant decrease in collection efficiency.
Figure 2. Comparison of leachate collection efficiencies for compacted soil and composite bottom liners.
Leakage out of the unit refers to leakage that passes into and through the bottom liner. As illustrated in Figure 3, composite liners have a much lower potential to allow leachate to migrate into the bottom liner. On a cumulative basis over 10 years, leakage into the bottom liner is higher for compacted soils with a hydraulic conductivity of $1 \times 10^{-7}$ cm/sec, as opposed to composite liners as shown in Figure 3.

Calculated results from the computer simulations indicate that the composite bottom liner performs consistently better than compacted low permeability soils with respect to maximizing leachate detection, collection, and removal and minimizing migration out of the unit. Based on these data, the difference in performance is significant. The other important trend noted in evaluating the data is that compacted low permeability soil lines with effective hydraulic conductivities greater than $1 \times 10^{-7}$ cm/sec perform significantly worse.

BILLING CODE 6560-50-M
CUMULATIVE LEAKAGE INTO THE BOTTOM LINER
OVER TEN YEARS

Figure 3. Cumulative leakage into the bottom liner over 10 years for a side wall top liner leak at 50
gal./acre/day.
4. Conclusions Based on New Data

The information collected and included in the background document argues strongly that the composite bottom liner with the FML upper component and compacted low-permeability soil lower component will significantly enhance the leachate collection and removal efficiency and the leakage detection capability of the LDCRS. The composite liner best meets the leakage detection capability of the FML upper component and compacted low-permeability soil lower component will significantly enhance the leachate permeability soil lower component will apply to new units, and replacements and lateral expansions of existing units. Other applicable hazardous waste management units include new landfills and surface impoundments and lateral expansions or replacements of existing landfills and surface impoundments that have been permitted before November 8, 1984. In addition, the existing single liner standards of 40 CFR 264.221(a) for surface impoundments, and 40 CFR 264.301(a) for landfills, are still applicable to portions of existing units that are not covered by waste at the time of permit issuance. Therefore, the draft single liner guidance is intended to provide guidance for land disposal facility owners or operators and EPA and State regulatory personnel on designs that the Agency believes meet the single liner performance standards of 40 CFR 264.221(a), 264.251(a), and 264.301(a). This document identifies design, construction, and operation specifications that can be used by owners or operators in order to comply with the requirements of those sections of the EPA rules.


J.W. McGraw,
Acting Assistant Administrator for Solid.

[FR Doc. 87-8721 Filed 4-16-87; 8:45 am]

BILLING CODE 6560-50-M

DEPARTMENT OF COMMERCE

50 CFR Part 652

National Oceanic and Atmospheric Administration

Atlantic Surf Clam and Ocean Quahog Fisheries

AGENCY: National Marine Fisheries Service (NMFS), NOAA, Commerce.

ACTION: Notice of availability of a fishery management plan amendment and request for comments.

SUMMARY: NOAA issues this notice that the Mid-Atlantic Fishery Management Council has submitted Amendment 7 to the Fishery Management Plan for the Atlantic Surf Clam and Ocean Quahog Fisheries (FMP) for review by the

Secretary of Commerce. Comments are invited from the public on the amendment and associated documents.

DATE: Comments will be accepted until June 11, 1987

ADDRESS: Send comments to Richard Schaefer, Acting Regional Director, Northeast Regional Office, National Marine Fisheries Service, 14 Elm Street, Gloucester, MA 01930. Mark “Comments on Atlantic surf clam and ocean quahog plan” on the envelope.

Copies of the amendment and its associated documents are available from John C. Bryson, Executive Director, Mid-Atlantic Fishery Management Council, Room 2113, Federal Building, 300 South New Street, Dover, DE 19901-8790.

FOR FURTHER INFORMATION CONTACT:
Bruce Nichols (plan coordinator), 617-281-3600, ext. 232.

SUPPLEMENTARY INFORMATION: The FMP and this amendment were prepared under the Magnuson Fishery Conservation and Management Act.

This amendment proposes measures to: (1) change the quarterly quota allocation for the Georges Bank area from 10%-40%-40%-10% to 25% for each quarter, (2) remove for all areas the 5,000 bushel threshold for transfer of unharvested quota from one quarter to the next, (3) add the provision that any unharvested quota in the Nantucket Shoals and Georges Bank areas be distributed proportionally among the remaining quarters of the year, (4) remove the 10% limit on carryover of unharvested quota from one year to the next, (5) require annual renewal of vessel permits, and (6) change the regulations to enhance prosecution and enforcement.

Proposed regulations for this amendment will be published within 15 days.

[16 U.S.C. 1851 et seq.]


Richard B. Roe,
Director, Office of Fisheries Management, National Marine Fisheries Service.

[FR Doc. 87-8721 Filed 4-14-87; 5:05 pm]

BILLING CODE 3510-25-M
This section of the FEDERAL REGISTER contains documents other than rules or proposed rules that are applicable to the public. Notices of hearings and investigations, committee meetings, agency decisions and rulings, delegations of authority, filing of petitions and applications and agency statements of organization and functions are examples of documents appearing in this section.

DEPARTMENT OF AGRICULTURE

Animal and Plant Health Inspection Service

[Docket No. 87-401]

National Animal Damage Control Advisory Committee; Criteria for Membership Selection

AGENCY: Animal and Plant Health Inspection Service, USDA.

ACTION: Notice.

SUMMARY: This document specifies the final criteria that has been adopted by the Secretary of Agriculture in selecting organizations for membership on the National Animal Damage Control Advisory Committee (NADCAC). The NADCAC is being formed to provide advice to the Secretary of Agriculture on policies, program issues, and research needed to conduct the Animal Damage Control (ADC) program of the Animal and Plant Health Inspection Service.

FOR FURTHER INFORMATION CONTACT: Gerald J. Fichtner, Acting Deputy Administrator for Animal Damage Control, APHIS, USDA, Room No. 1624 South Building, 14th and Independence Avenue, SW., Washington, DC 20250, Area Code (202) 447-2054.

Supplementary Information: On November 6, 1986, the Animal and Plant Health Inspection Service published a notice in the Federal Register (51 FR 40345) which set forth eight criteria that the Secretary of Agriculture proposed to use in selecting organizations for membership on the NADCAC. The NADCAC is being formed to provide advice to the Secretary of Agriculture on policies, program issues, and research needed to conduct the ADC program of USDA. The NADCAC is also intended to serve as a public forum which will enable those affected to have a voice in the ADC program’s policies.

The November 6 notice invited the submission of written comments on the proposed criteria for 31 days until December 8, 1986. Based on the comments received, the Secretary will use the same eight criteria as the final criteria in selecting organizations for the NADCAC:

1. National in scope.
2. Non-Federal (except for congressionally directed).
3. Experience in cooperative working relationships.
4. Tradition of national public interest and service.
5. Record of achievement in national public interest goals.
6. Subject matter knowledge and experience.
7. Represents clients fairly and comprehensively.
8. Continuing interest in ADC.

This notice is given in compliance with the Federal Advisory Committee Act (Public Law 92-466).

Done in Washington, DC, this 13th day of April, 1987.

Bert W. Hawkins, Administrator, Animal and Plant Health Inspection Service.

[FR Doc. 87-8658 Filed 4-16-87; 8:45 am]

BILLING CODE 3410-34-M

DEPARTMENT OF COMMERCE

International Trade Administration

[Case No. OEE-3-86]

Order Renewing Temporary Denial of Export Privileges; Bollinger GmbH et al.

In the matter of; Bollinger GmbH, Roseggergasse 34, 1160 Vienna, Austria; Leopold Hrobsky, Donaufelderstrasse 38, Sgl. 4, Apt. 4, 1210 Vienna, Austria; Dietmar Ulrichshofer, with addresses at Kirchenstrasse 1, 2061 Ollersbach, Austria and c/o Bollinger GmbH, Roseggergasse 34, 1160 Vienna, Austria and Vrablicz and Company, Steinerergasse 11, 1170 Vienne, Austria, Respondents.

The Office of Export Enforcement, International Trade Administration, United States Department of Commerce (Department), pursuant to the provisions of § 388.19 of the Export Administration Regulations, 15 CFR Parts 730-774 (1986) (the Regulations), issued pursuant to the Export Administration Act of 1979, 50 U.S.C. app. Sections 2401-2420 (1982), as amended by the Export Administration Amendments Act of 1985, Pub. L. 99-64, 99 Stat. 120 (July 12, 1985) (the Act), has asked the Deputy Assistant Secretary for Export Enforcement to renew an order temporarily denying all United States export privileges to Dietmar Ulrichshofer; Bollinger GmbH, which is owned by Dietmar Ulrichshofer; Leopold Hrobsky; and, Vrablicz and Company (hereinafter collectively referred to as respondents). Ulrichshofer, who is subject to an outstanding indictment in the U.S. District Court for the Central District of California for conspiracy to violate U.S. export controls and is a fugitive from U.S. justice, resides in Ollersbach, Austria; all of the other respondents reside in Vienna, Austria. 1

The initial order was issued on August 12, 1986 (51 FR 29500, August 18, 1986) and renewed on October 11, 1986 (51 FR 37210, October 20, 1986), December 10, 1986 (51 FR 44555, December 11, 1986) and February 8, 1987 (52 FR 463, February 13, 1987).

In its renewal request dated March 20, 1987 the Department states that, as a result of an ongoing investigation, it has reason to believe that respondents have conspired and acted in concert to violate the Act and the Regulations. The Department has reason to believe that the purpose of the conspiracy is to obtain U.S.-origin goods from third countries for ultimate destination in proscribed countries, without obtaining the required authorization from the Department for such shipments. The Department has reason to believe that respondents have participated in the unauthorized reexport of U.S.-origin commodities, including computer equipment and peripherals, from Austria to proscribed destinations, without authorization from the Department.

Indeed, the Department previously provided a statement by the U.S. Customs Attaché in Austria that his aspect of the investigation has revealed that respondent Vrablicz, on August 5, 1986, reexported such commodities to Czechoslovakia, which commodities were "owned" by respondent Bollinger. The Department further has shown that a statement given by the Customs Attaché indicates that respondents

1 Werner Bruchhausen, a co-defendant named in the indictment along with Ulrichshofer was just convicted in February 20, 1987, in the U.S. District Court, Los Angeles, California in connection with some of the export control violation activities underlying the Ulrichshofer indictment.
Ulnchshofer and Hrobsky directed sales of commodities covering the investigation to the Soviet Bloc. The Department has also shown that Ulrichshofer is involved with other parties in reexporting U.S.-origin commodities from Austria to proscribed destinations. Further, since the respondents currently have possession and control of U.S.-origin goods subject to the Act and the Regulations, the Department states that violations are likely to occur again. The Department submits that renewal of the temporary denial order naming respondents is necessary for the purpose of giving notice to companies in the United States and abroad that they do not have permission to sell or lease with respondents in goods and technical data subject to the Act and the Regulations in order to reduce the likelihood that respondents will continue to engage in activities which are in violation of the Act and the Regulations.

Respondents Vrablicz submitted to the Deputy Assistant Secretary a letter dated March 24, 1987 contesting the Department’s request for renewal of the order. This letter was received in a timely manner and copies were provided to the Department. In response to the Department’s allegation that Vrablicz has continued to refuse to provide information relevant to this case, Vrablicz contends it has already proven its willingness to cooperate with U.S. authorities. As evidence of this asserted cooperation, Vrablicz provides a letter dated March 24, 1987 from the Customs Attaché in Vienna on February 24, 1987 meeting the request to those requests dated March 13 1987. These two documents were not provided in English or with an English translation as is required by the Act (§ 386.7(e)). Therefore, these documents are not helpful to support the company’s contention that it has been cooperative. But assuming arguendo that Vrablicz had provided some cooperation, that alone would not be sufficient to show that a temporary denial order is no longer needed. If the Department should become sufficiently satisfied with Vrablicz’s (or any other respondent’s) level of cooperation and with its explanation of its past involvement with the violations that are under investigation, this order could be modified upon request by the Department.

Based on the showing by the Department, and given that no other respondent filed opposition to the request for renewal, I find that renewal of the order temporarily denying export privileges to respondents is necessary in the public interest to prevent an imminent violation of the Act and the Regulations and to give notice to companies in the United States and abroad to cease dealing with respondents in goods and technical data subject to the Act and the Regulations in order to reduce the substantial likelihood that respondents will continue to engage in activities which are in violation of the Act and the Regulations.

Accordingly, it is hereby Ordered:

1. All outstanding validated export licenses in which any respondent appears or participates, in any manner or capacity, are hereby revoked and shall be returned forthwith to the Office of Export Licensing for cancellation.

2. The respondents, their successors or assignees, officers, partners, representatives, agents, and employees hereby are denied all privileges of participating, directly or indirectly, in any manner or capacity, in any transaction involving commodities or technical data exported or to be exported from the United States in whole or in part, or that are otherwise subject to the Regulations. Without limiting the generality of the foregoing, participation, either in the United States or abroad, shall include participation, directly or indirectly, in any manner or capacity: (a) As a party or as a representative of a party to any export license application submitted to the Department; (b) in preparing or filing with the Department a export license application or reexport authorization, or any document to be submitted therewith; (c) in obtaining or using any validated or general export license or other export control document, (d) in carrying on negotiations with respect to, or in receiving, ordering, buying, selling, delivering, storing, using, or disposing of, in whole or in part, any commodities or technical data exported from the United States, or to be exported, and (e) in financing, forwarding, transporting, or other servicing of such commodities or technical data. Such denial of export privileges shall extend only to those commodities and technical data which are subject to the Act and the Regulations.

3. After notice and opportunity for comment, such denial may be made applicable to any person, firm, corporation, or business organization with which any respondent is now or hereafter may be related by affiliation, ownership, control, position of responsibility, or other connection in the conduct of trade or related services.

4. No person, firm, corporation, partnership or other business organization, whether in the United States or elsewhere, without prior disclosure to and specific authorization from the Office of Export Licensing shall, with respect to U.S.-origin commodities and technical data, do any of the following acts, directly or indirectly, or carry on negotiations with respect thereto, in any manner or capacity, on behalf of or in any association with any respondent or any related party, or whereby any respondent or any related party may obtain any benefit therefrom or have any interest or participation therein, directly or indirectly: (a) Apply for, obtain, transfer, or use any license, Shipper’s Export Declaration, bill of lading, or other export control document relating to any export, reexport, transshipment, or diversion of any commodity or technical data exported in whole or in part, or to be exported by, to, or for any respondent or any related party denied export privileges; or (b) order, buy, receive, use, sell, deliver, store, dispose of, forward, transport, finance, or otherwise service or participate in any export, reexport, transshipment, or diversion of any commodity or technical data exported or to be exported from the United States.

5. In accordance with the provisions of § 388.19(e) of the Regulations, any respondent may, at any time, appeal this order by filing with the Office of the Administrative Law Judges. U.S. Department of Commerce, Room H-6716, 14th Street and Constitution Avenue NW., Washington, DC 20230, a full written statement in support of the appeal.

6. This order is effective April 9, 1987 and shall remain in effect for 60 days.
VII. In accordance with the provisions of § 388.19(d) of the Regulations, the Department may seek renewal of this temporary denial order by filing a written request not later than 20 days before the expiration date. Any respondent may oppose any request to renew this temporary denial order by filing a written submission with the Deputy Assistant Secretary for Export Enforcement, which must be received not later than seven days before the expiration date of this order.

A copy of this order shall be served upon each respondent and published in the Federal Register.


Theodore W. Wu,
Deputy Assistant Secretary for Export Enforcement.

[FR Doc. 87–8716 Filed 4–19–87; 8:45 am]

BILLING CODE 3510–25–M

[Application #87–00001]

Export Trade Certificate of Review


SUMMARY: The Department of Commerce has issued an export trade certificate of review to American Film Marketing Association. This notice summarizes the conduct for which certification has been granted.

FOR FURTHER INFORMATION CONTACT: George Muller, Acting Director, Office of Export Trading Company Affairs, International Trade Administration, 202–377–5131. This is not a toll-free number.

SUPPLEMENTARY INFORMATION: Title III of the Export Trading Company Act of 1982 ("the Act") (Pub. L. No. 97–200) authorizes the Secretary of Commerce to issue export trade certificates of review. The regulations implementing Title III are found at CFR Part 325 (50 FR 1804, January 11, 1985).

The Office of Export Trading Company Affairs is issuing this notice pursuant to 15 CFR 325.6(b), which requires the Department of Commerce to publish a summary of a certificate in the Federal Register. Under Section 305(a) of the Act and 15 CFR 325.11(e), any person aggrieved by the Secretary's determination may, within 30 days of the date of such notice, bring an action in any appropriate district court of the United States to set aside the determination on the ground that the determination is erroneous.

Description of Certified Conduct

Export Trade

- Licensing and sales, and the facilitation of licensing and sales, of distribution rights to independently-produced, English-language motion pictures, television programs, and video recordings, and ancillary rights to them (video cassette rights, broadcast or satellite television rights, cable television rights, music rights, etc.). All of these rights are referred to in this notice as "Distribution Rights".

Exports Markets

The Export Markets include all parts of the world except the United States (the fifty States of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the Trust Territory of the Pacific Islands).

Export Trade Activities and Methods of Operation

With respect to the licensing and sale of Distribution Rights in the Export Markets, AFMA and its Members may engage in activities related to:

1. Promulgating voluntary model sales contract forms among the AFMA Members;
2. Providing services to AFMA Members and others in arbitration of disputes arising over the terms of licensing or sales;
3. Exchange of information among AFMA Members regarding all aspects of foreign market conditions and customers;
4. Development and recommendation among AFMA Members of voluntary model business practices, including methods of reducing foreign trade barriers, improving intellectual property protection, and expanding markets;
5. Collection and dissemination among AFMA Members of foreign market research information;
6. Negotiation and agreement with representatives of foreign governments and organizations toward reducing trade barriers, expanding markets, and improving intellectual property protection; and
7. Certification of AFMA Members as to such matters as involvement in transactions, evidence of ownership, and true signatures.

Members (within the meaning of § 325.2(1) of the Regulations)


A copy of each certificate will be kept in the International Trade Administration's Freedom of Information Records Inspection Facility, Room 4102, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230.


George Muller,
Acting Director, Office of Export Trading Company Affairs.

[FR Doc. 87–00019 Filed 4–18–87; 8:45 am]

BILLING CODE 3510–OR–M

National Oceanic and Atmospheric Administration

Intent To Update a Special Study of State Coastal Zone Management Programs.

ACTION: Notice of intent to undertake a special study of state coastal zone management programs in response to the Presidential Directive on national energy security.

SUMMARY: On June 6, 1986, the President announced a new effort to preserve the nation's energy resources. As part of the directive, he instructed the Secretary of Commerce to "begin a review of State coastal zone management programs to advance the 'national interest' in energy security." Included in the Directive was the specific charge to seek to streamline permitting processes.

The state coastal zone management programs are most directly involved in energy development through their permitting processes. This includes direct permitting of activities (e.g., construction permits on land) as well as broader approval actions such as the Federal consistency provisions under § 307 of the Coastal Zone Management Act (CZMA). Permit simplification is a broader approval processes such as the construction permits on land) as well permitting processes. This includes energy development through their permitting processes. This includes direct permitting of activities (e.g., construction permits on land) as well as broader approval actions such as the Federal consistency provisions under § 307 of the Coastal Zone Management Act (CZMA). Permit simplification is a broader objective of the CZMA as expressed in §303(2)(F) which declares that each program must provide for the "the coordination and simplification of procedures in order to ensure expedited governmental decisionmaking for the management of coastal resources." Since the first coastal program was approved in 1976, the participating states have engaged in a number of efforts to comply with this objective. In response to the Presidential Directive and pursuant to the authority of the CZMA, the Office of Ocean and Coastal Resource Management (OCRM) is undertaking a study which will identify successful permit simplification efforts and use these as a basis for specific recommendations to the coastal zone management programs. The study will include three tasks.

**Task 1: Current status of state permitting systems.**

This task will develop a description of the overall permitting structure of each participating coastal zone management program and will document any efforts undertaken by the state to simplify and shorten its permitting process. The types of streamlining methods that OCRM will review will include, but not be limited to: joint permitting, general permitting, single or consolidated permitting, multi-agency consultation, designation of specific time frames for agency actions, and delegation of decisions to lower governmental levels. Vehicles for accomplishing these permitting improvements may include gubernatorial executive orders, state laws, regulations, interagency memoranda of understanding, inter-agency directives and informal agreements. OCRM will use the results of this task as the basis for recommendations for improvements developed in task 3.

**Task 2: In-depth analysis of selected states.**

This task will undertake a more detailed analysis of the permitting systems of three to six states. OCRM will base its selection of the states to be reviewed on the scope and perceived effectiveness of the states' permit simplification efforts as well as their potential applicability to other coastal programs. In addition to its analysis of the selected states, OCRM may also examine in detail specific permitting techniques from other states which appear particularly effective from the permit simplification viewpoint. Some of the questions that OCRM will address in the analysis are: what was the state's permit issuance process prior to the establishment of the permit simplification technique; how did the state choose the permit simplification technique; what were the state's experiences in implementing the technique; did the state attempt to implement any techniques which failed and were abandoned; how does the technique work; what improvements could the state make to improve efficiency; what are the reactions of state and local officials, business interests, and the public to the technique; and, have evaluators measure the success of the technique in terms of reduction in permit processing time, reduction in the number of permits denied or issued with conditions, reduction in the number of permit appeals, or reduction in the number of complaints regarding the permit process?

This analysis will identify the key elements in the successful adoption of each permit streamlining technique. It will also identify the types of permitting structures where the technique could be successfully applied.

**Task 3: Development of recommendations.**

The coastal program profiles developed in task 1 and the simplification technique analysis in task 2 will be the basis for specific recommendations by OCRM to the states on ways to improve their permit processing. The primary focus of the recommendations will be those states and permit processing which OCRM has previously identified in evaluations under § 312 of the CZMA or other ongoing reviews as needing improvement. OCRM will provide technical assistance to the states on the implementation of these recommendations. OCRM anticipates completing this study in early 1988.

FOR FURTHER INFORMATION CONTACT:

Federal Domestic Assistance Catalogue 11.419 Coastal Zone Management Program Administration.

Dated: April 13, 1987

Peter L. Tweedt, Director.

[FR Doc 87-8896 Filed 4-16-87; 8:45 am]
BILLING CODE 3510-06-M

---

COMMITTEE FOR PURCHASE FROM THE BLIND AND OTHER SEVERELY HANDICAPPED

Procurement List 1987; Additions

AGENCY: Committee for Purchase from the Blind and Other Severely Handicapped.

ACTION: Additions to Procurement List.

SUMMARY: This action adds to Procurement List 1987 commodities to be supplied by and to service to be provided by workshops for the blind or other severely handicapped.

EFFECTIVE DATE: May 19, 1987

ADDRESS: Committee for Purchase from the Blind and Other Severely Handicapped, Crystal Square 5, Suite 1107, 1755 Jefferson Davis Highway, Arlington, Virginia 22202-3509.

FOR FURTHER INFORMATION CONTACT: C.W. Fletcher, (703) 557-1145.

SUPPLEMENTARY INFORMATION: On August 29, 1986, November 21, 1986, December 29, 1986 and January 20, 1987 the Committee for Purchase from the Blind and Other Severely Handicapped published notices (51 FR 30899, 42129, 46908 and 52 FR 2143) of proposed additions to Procurement List 1987 November 3, 1986 (51 FR 39945). A comment was received with respect to the proposed addition of Water Bag, Nylon Duck, NSN 6405-01-185-5511 as the result of the Committee staff having notified the current contractor of the proposed addition. The contractor was requested to include its annual sales to all sources if it elected to submit comments. That firm responded and indicated that the loss of the water bag contract would have a significant negative impact on the firm in that the contract represented 15% of all revenue projected for the coming year in its
industrial sewing department. It stated further that it had acquired additional machinery specifically built to meet the requirements of its contract and has hired and trained additional labor specifically for the contract.

Since the firm did not state its total annual sales, but related the loss to sales of its industrial sewing department only, a second certified letter was sent to it indicating that the comments related to its current contract which would not be affected by the proposed action. The firm was advised that if the Committee did not receive additional information which related to possible impact as the result of the proposed action, it would be assumed that the impact on the firm would not be severe. The firm did not submit further comments.

Based on the information available, the impact on the current contractor for the water bag is not considered to be serious.

Additions

After consideration of the relevant matter presented, the Committee has determined that the commodities and service listed below are suitable for procurement by the Federal Government under 41 U.S.C. 49-48c, 85 Stat. 77 and 41 CFR 51-2.9.

I certify that the following action will not have a significant impact on a substantial number of small entities. The major factors considered were:

a. The action will not result in any additional reporting, recordkeeping or other compliance requirements.

b. The action will not have a serious economic impact on any contractors for the commodities and service listed.

c. The action will result in authorizing small entities to produce the commodities and service procured by the Government.

Accordingly, the following commodities and service are hereby added to Procurement List 1987:

Commodities

**Boxspring**
7210-00-NIB-0006 Twin, "38 x 80"
7210-00-NIB-0006 Full, "53 x 80"

(Requirements for nonappropriated Fund Activities of the Armed Forces only)

**Mattress (Innerspring)**
7210-00-NIB-0009 Twin, "38 x 80"
7210-00-NIB-0004 Full, "53 x 80"

(Requirements for nonappropriated Fund Activities of the Armed Forces only)

**Enamel, Lacquer**
8010-00-508-5936
8010-00-849-5117
8010-00-852-0033
8010-00-852-0034
8010-00-998-1458
8010-00-794-8434
8010-00-849-9272
8010-00-679-5761
8010-00-610-8154
8010-00-167-1139
8010-00-348-7715
8010-00-610-9143
8010-00-610-9144
8010-00-782-0356
8010-00-181-7371
8010-00-936-8366
8010-00-936-8367
8010-00-936-8370

**Water Bag, Nylon Duck**
8465-01-185-5511

**Service**
Commissary Shelf Stocking
Commissary Branch Store
Mayport, Florida

**Parts Sorting**
McClellan Air Force Base, California
C.W. Fletcher, Executive Director.

In accordance with section 10(d) of the Federal Advisory Committee Act, Pub. L. No. 92-463, as amended (5 U.S.C. App. II, [1982]), it has been determined that these DSB Task Force Meetings, concern matters listed in 5 U.S.C. § 552(c)(1) [1982], and that accordingly these meetings will be closed to the public.

Patricia H. Means,
CSD Federal Register Liaison Officer,
Department of Defense.

In accordance with section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92-436), announcement is made of the following committee meeting:

**Army Science Board; Open Meeting**

**Army Science Board Task Force on Image Recognition Systems; Meeting**

**Office of the Secretary**

**Defense Science Board Task Force on Image Recognition Systems; Meeting**

**SUMMARY:** The Defense Science Board Task Force on Image Recognition Systems will meet in closed session on June 18 and July 23, 1987 at the Pentagon, Arlington, Virginia.

The mission of the Defense Science Board is to advise the Secretary of Defense and the Under Secretary of Defense for Acquisition on Scientific and technical matters as they affect the perceived needs of the Department of Defense. At these meetings the Task Force will study the current status and probable near-to-medium-term development of computer-based image recognition systems with emphasis on the potential for further development in "smart weapons," especially those for attacking ground vehicles.
Research, Development and Engineering Center, Fort Monmouth, New Jersey

Agenda: The ASB Panel will visit the CECOM RD&E Center for the purpose of gathering data for the conduct of the effectiveness review of that facility. The meeting will consist of briefings by the RD&E Center staff, interviews with the Project Managers and interviews with a cross section of the RD&E Center staff. This meeting will be closed to the public in accordance with section 552(c) of Title 5, U.S.C., specifically subparagraph (1) thereof, and Title 5, U.S.C., Appendix 1, subsection 10(d). The classified and nonclassified matters to be discussed are so inextricably intertwined so as to preclude opening any portion of the meeting. The ASB Administrative Officer, Sally Warner, may be contacted for further information at (202) 685-3039 or 655-7069.

Sandra F. Gearhart, Administrative Assistant, Army Science Board.

[FR Doc. 87-8798 Filed 4-10-87; 8:45 am]
BILLING CODE 3710-05-M

Corps of Engineers, Department of the Army

Coastal Engineering Research Board; Open Meeting

In accordance with section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92-463), announcement is made of the following Committee meeting:

Name of Committee: Coastal Engineering Research Board (CERB).
Date of Meeting: May 19-21, 1987.
Place: Corps Christi, Texas.
Time: 8:30 a.m. to 4:45 p.m. on May 19; 8:00 a.m. to 4:30 p.m. on May 20; 8:00 a.m. to 11:30 a.m. on May 21.

Proposed Agenda: The May 19 session will consist of a review of previous CERB business, an update of FY 87 Coastal Engineering R&D Program, the status of recommendations to the Chief of Engineers, presentations and discussions on Private Sector Initiative, Dredging Program, Coastal Geology and Geotechnology R&D Needs in the Corps, an overview of Galveston District projects, Southwestern Division Research Needs, Preliminary Results of SUPERDUCK Surf Zone Experiments, Crescent City Delosse Monitoring Project, Mouth of the Colorado, Corpus Christi Inner Harbor Sh𝑜𝑎𝑙ing Study, and a tour briefing.

A field trip to Corpus Christi North Beach, Mouth of the Colorado, Corpus Christi Inner Harbor, and King Ranch Shrimp Mariculture Site is planned for May 20, with a discussion of the field trip scheduled following the return to the hotel.

The session on May 21 will consist of presentations and discussions on Biperiodic Waves in Shallow Water and North Central Division Research Needs, recommendations by members of the Board, and selection of date and place for the next CERB meeting.

This meeting is open to the public; participation by the public is scheduled for 8:15 a.m. on May 21. The public may attend the tour on May 20, but must provide their own transportation.

The entire meeting is open to the public subject to the following:
1. Since seating capacity of the meeting room is limited, advance notice of intent to attend, although not required, is requested in order to assure adequate arrangements for those wishing to attend.
2. Oral participation by public attendees is encouraged during the time scheduled on the agenda; written statements may be submitted prior to the meeting or up to 30 days after the meeting.

Inquiries and notice of intent to attend the meeting may be addressed to Colonel Dwayne G. Lee, Executive Secretary, Coastal Engineering Research Board, U.S. Army Engineer Waterways Experiment Station, P.O. Box 631, Vicksburg, Mississippi 39180-0631.

Dwayne G. Lee,
Colonel, Corps of Engineers, Executive Secretary.

[FR Doc. 87-8633 Filed 4-16-87; 8:45 am]
BILLING CODE 3710-05-M

DEPARTMENT OF EDUCATION

National Advisory Council on Continuing Education; Meeting

AGENCY: National Advisory Council on Continuing Education, Education.
ACTION: Notice of meeting.
SUMMARY: This notice sets forth the schedule and proposed agenda of a meeting of the National Advisory Council on Continuing Education. It also describes the functions of the Council. Notice of meetings is required under section 10(a)(2) of the Federal Advisory Committee Act. This document is intended to notify the general public of their opportunity to attend.
DATES: April 29-May 1, 1987
SUPPLEMENTARY INFORMATION: The National Advisory Council on Continuing Education is established under Section 117 of the Higher Education Act (20 U.S.C. 1109), as amended. The Council is established to advise the President, the Congress, and the Secretary of the Department of Education on the following subjects:
(a) An examination of all federally supported continuing education and training programs, and recommendations to eliminate duplication and encourage coordination among these programs;
(b) The preparation of general regulations and the development of policies and procedures related to the administration of the Higher Education Act with regard to continuing education;
(c) Activities that will lead to changes in the legislative provisions of federal laws affecting continuing education and training programs.

The meetings of the Council are open to the public. However, meetings are held in a small conference room to minimize costs and those interested in attending are asked to call the Council's office beforehand so accommodation can be made to provide extra seating for them.

The Executive Committee will meet from 8:30 p.m. to 9:00 p.m. on April 29, and the full Council will meet from 8:00 am to 5:00 p.m. on April 30 and from 8:00 a.m. to 12:00 p.m. on May 1, 1987. The proposed agenda includes:
Changes in Charter
Pending Changes in Committee Management Regulations
Pending Changes in Federal Advisory Committee Act
Expanded NACCE mandate as of 1986
Reauthorization
Provisions in the Higher Education Technical Amendments
Personnel Matters
Budget—Expenditures made and planned
Report on Ongoing Research

Records are kept of all Council proceedings and are available for public inspection at the office of the National Advisory Council on Continuing Education, 2000 L Street, NW., Suite 560, Washington, DC 20036.

Signed at Washington, DC, on April 1, 1987.

Mary W. Hansen,
Special Assistant.
[FR Doc. 87-8382 Filed 4-16-87; 8:45 am]
Transmission Rate Adjustment

Power Administration

Written Comment Period

Public Comment Forum and Close of
Written Comment Period in Bonneville
Power Administration 1987 Wholesale
Power Rate Adjustment and
Transmission Rate Adjustment
Proceedings

AGENCY: Bonneville Power Administration (BPA), DOE.

ACTION: Notice. BPA File Nos. WP-87 and TR-87
requests that all documents regarding wholesale power
rates contain the file number
designation WP-87 Those comments pertaining to transmission rates should
be designated TR-87

SUMMARY: On December 30, 1986, BPA published notices of "Proposed
Wholesale Power Rate Adjustment, Public Hearings, and Opportunities for
Public Review and Comment," 51 FR 47108, and "Proposed Transmission Rate
Adjustment, Public Hearings, and Opportunities for Public Review and Comment," 51 FR 47144. In these notices, BPA scheduled a series of public field
hearings regarding BPA's wholesale power and transmission rates proposals.
BPA also announced that a second
series of field hearings would be considered. The first series of field
hearings was held February 3 through
February 12, 1987. At this time, BPA
announces a second public comment forum, in Portland Oregon, on April 30, 1987

BPA also announces that the deadline
for submitting written comments on the wholesale power and transmission rates proposals is 5 p.m. PDT on Friday, May 15, 1987

DATES: The public comment forum is scheduled for Thursday, April 30, 1987
at 7:30 p.m., in the Klamath Room, Red Lion Inn-Columbia River, 1401 N.
Hayden Island Drive, Portland, Oregon. The comment period for written comments submitted in BPA File Nos. WP-87 and TR-87 will close at 5 p.m.
PDT, on Friday, May 15, 1987

Commenters should allow sufficient time for mail delivery to ensure this
deadline is met.

ADDRESS: Written comments not submitted at the rate adjustment
hearings or at the public comment forum should be submitted to Ms. Donna L.
Geiger, Public Involvement Manager, Bonneville Power Administration, P.O. Box 12399, Portland, Oregon 97212.

FOR FURTHER INFORMATION CONTACT:
Kathleen S. Johnson, Public Involvement Office, at the address listed above, 503–
230–3478. Oregon callers outside
Portland may use 800–452–8429; callers in California, Idaho, Montana, Nevada, Utah, Wyoming, and Washington may use 800–547–6048. Information may also be obtained from:
Mr. Terence C. Esvelt, Puget Sound Area
Manager, 201 Queen Anne Avenue North, Seattle, Washington 98109, 206–442–4130.
Mr. George E. Gwmnutt, Lower Columbia Area
Manager, Suite 208, 1500 Plaza Building, 1500 NE. Irving Street, Portland, Oregon
Mr. Ladd Sutton, Eugene District Manager,
Room 206, 211 East Seventh Street, Eugene, Oregon 97401, 503–867–8652.
Mr. Wayne R. Lee, Upper Columbia Area
Manager, Room 501, West 20th Riverside
Avenue, Spokane, Washington 99201, 509–
456–2518.
Mr. Ronald K. Rodewald, Wenatchee
District Manager, P.O. Box 741, Wenatchee,
Mr. George E. Eskridge, Montana District
Manager, 800 Kensington, Missoula, Montana
Mr. Thomas Wagenhoffer, Snake River
Area Manager, West 101 Pollar, Walla
Mr. Robert N. Laffel, Idaho Falls District
Manager, 531 Lomax Street, Idaho Falls,
Idaho 83401, 208–523–2706.
Mr. Frederic D. Rettenmund, Boise District
Manager, Federal Building, 550 W. Fort
Street, Rm. 378, Boise, Idaho 83724, 208–334–
9137

SUPPLEMENTARY INFORMATION:
I. Public Comment Forum

The Administrator, in consultation with the BPA Area Managers, has
determined that the first series of field
hearings provided sufficient opportunity for public comment in the regional areas
of Spokane, Tacomma, Everett, and
Richland, Washington; Burley, Idaho;
Jackson, Wyoming; and Eugene, Oregon. The Administrator has determined that a public comment forum in the Portland, Oregon
metropolitan area will provide a
large number of persons an additional opportunity to speak. This public
comment forum is scheduled after the
formal hearings in the rate case to provide the public an opportunity to
comment on the evidence presented in the formal proceedings.

The public comment forum is scheduled for Thursday, April 30, 1987
in the Klamath Room, Red Lion Inn-Columbia River, 1401 N. Hayden Island
Drive, Portland, Oregon. Registration
will be at 7 p.m., and the comment forum will begin at 7:30 p.m. BPA area staff
will preside. The comments submitted at the comment forum will be made a part of
the Official Record. This opportunity is
in addition to the opportunities to submit written comments throughout the
rate proceeding.

II. Close of Written Comment Period

BPA has to date received well over
7,000 written comments from
participants. In order to allow the Administrator an opportunity to consider these written comments, the Administrator has decided to close the
comment period for written comments on Friday, May 15, 1987. This date will permit the Administrator to include in his Draft Record of Decision the written
comments received from the participants. Comments must be
received by 5 p.m. PDT on May
15, 1987 in order to be included in the
Official Record for the Administrator's consideration.

Issued in Portland, Oregon, this th 8th day of
April 1987.

Steven G. Hacki
Acting Administrator.

[FR Doc. 87–773 Filed 4–16–87; 8:45 am]
BILLING CODE 6450–01–M

Economic Regulatory Administration
[ERA Docket No. 87–15–NG]

Spot Market Corp., Application To
Import Natural Gas From Canada

AGENCY: Department of Energy, Economic Regulatory Administration.

ACTION: Notice of application for blanket authorization to import natural
gas from Canada.

SUMMARY: The Economic Regulatory Administration (ERA) of the Department
of Energy (DOE) gives notice of receipt on March 18, 1987 of an application
filed by Spot Market Corporation (SMC)
for blanket authority to import up to 100
Bcf of natural gas annually for a two-
year period beginning on the date initial
deliveries commence. The gas would
be supplied by producers in the Canadian Provinces of Alberta and British
Columbia and sold on a short-term basis
in the domestic spot market to
customers that are expected to include
gas distributors, pipelines, electric
utilities and industrial or agricultural
users. SMC would act as a broker and/or
agent on behalf of U.S. purchasers
and Canadian suppliers. The specific
terms of each import and sale would be
negotiated on an individual basis
including the price and volumes. SMC
proposes to advise the ERA of the date
of first delivery of the import and submit
quarterly reports describing the
particular transactions. Deliveries of this
gas will take place at existing points of
interconnection between U.S. and
Canadian pipeline systems all across
Canada.
SMC is currently authorized to import for spot market sales up to 50 Bcf of Canadian natural gas per year over a two-year term beginning on the date of the first delivery. At that time, no gas has been received under that authorization. If the present application is approved the two authorizations together would permit SMC to import a total volume of 300 Bcf.

The application is filed with the ERA pursuant to section 3 of the Natural Gas Act and DOE Delegation Order No. 0074–111. Protests, motions to intervene, notices of intervention and written comments are invited.

DATE: Protests, motions to intervene or notices of intervention, as applicable, and written comments are to be filed no later than 4:30 p.m., on May 18, 1987

FOR FURTHER INFORMATION CONTACT:


SUPPLEMENTARY INFORMATION: The decision on this application will be made consistent with DOE’s gas import policy guidelines, under which the competitiveness of an import arrangement in the markets served is the primary consideration in determining whether it is in the public interest (49 FR 6864, February 22, 1984). Parties that may oppose this application should comment in their responses on the issue of competitiveness as set forth in the policy guidelines. The applicant asserts that this import arrangement is competitive. Parties opposing the arrangement bear the burden of overcoming this assertion.

Public Comment Procedures

In response to this notice, any person may file a protest, motion to intervene, or notice of intervention, as applicable, and written comments. Any person wishing to become a party to the proceeding and to have written comments considered as the basis for any decision on the application must, however, file a motion to intervene or notice of intervention, as applicable. The filing of a protest with respect to this application will not serve to make the protestant a party to the proceeding, although protest and comments received from persons who are not parties will be considered in determining the appropriate procedural action to be taken on the application. All protests, motions to intervene, notices of intervention, and written comments must meet the requirements that are specified by the regulations in 10 CFR Part 500. They should be filed with the Natural Gas Division, Office of Fuels Programs, Economic Regulatory Administration, Room GA–076, RG–23, Forrestal Building, 1000 Independence Avenue, SW., Washington, DC 20585, (202) 586–4878. They must be filed no later than 4:30 p.m. e.d.t., May 18, 1987.

The Administrator intends to develop a decisional record on the application through procedures to be established by parties, including the parties’ written comments and replies thereto.

Additional procedures will be used as necessary to achieve a complete understanding of the facts and issues. A party seeking intervention may request that additional procedures be provided, such as additional written comments, an oral presentation, a conference, or a trial-type hearing. Any request to file additional written comments should explain why they are necessary. Any request for an oral presentation should identify the substantial question of fact, law, or policy at issue, show that it is material and relevant to a decision in the proceeding, and demonstrate why an oral presentation is needed. Any request for a conference should demonstrate why the conference would materially advance the proceeding; any request for a trial-type hearing must show that there are factual issues genuinely in dispute that are relevant and material to a decision and that a trial-type hearing is necessary for a full and true disclosure of the facts.

If an additional procedure is scheduled, the ERA will provide notice to all parties. If no party requests additional procedures, a final opinion and order may be issued based on the official record, including the application and responses filed by parties pursuant to this notice, in accordance with 10 CFR 500.316.

A copy of SMC’s application is available for inspection and copying in the Natural Gas Docket Room, GA–076, at the above address. The docket room is open between the hours of 8:30 a.m. and 4:30 p.m. Monday through Friday, except Federal holidays.

Issued in Washington, DC, on April 3, 1987

Robert L. Davies,
Director, Office of Fuels Programs, Economic Regulatory Administration.

[FR Doc. 87–6719 Filed 4–16–87; 8:45 am]
from the prohibitions of the Act within six months after the end of the period for public comment and hearing, unless ERA extends such period. Notice of any such extension, together with a statement of reasons therefor, would be published in the Federal Register.

DATES: Written comments are due on or before June 1, 1987. A request for a public hearing must be made within this same 45-day period.

ADDRESSES: Fifteen copies of written comments or a request for a public hearing shall be submitted to: Case Control Unit, Office of Fuels Programs, Room Gas-093, Forrestal Building, 1000 Independence Ave., SW., Washington, DC 20585.

Docket No. ERA C&E-87-44 should be printed on the outside of the envelope and the document contained therein.

FOR FURTHER INFORMATION CONTACT:
Frank Duchaine, Coal and Electricity Division, Office of Fuels Programs, Economic Regulatory Administration, 1000 Independence Avenue, SW., Room GA-083, Washington, DC 20585, Telephone (202) 586-6823.

Steven E. Ferguson, Esq., Office of General Counsel, Department of Energy, Room 6A-113, 1000 Independence Avenue, SW., Washington, DC 20585, Telephone (202) 586-6947.

SUPPLEMENTARY INFORMATION: The proposed facility will be a combined cycle gas turbine cogeneration plant. The 65 megawatt cogeneration plant will utilize one Brown Boveri Corporation Type 8 gas turbine in conjunction with a waste heat recovery steam generator and a steam turbine. Electricity generated will be used at the Marcel Paper Mills plant and sold to Jersey Central Power and Light. Steam generated will be used in the Marcel Paper Mills plant.

Section 212(a)(1)(A)(ii) of the Act provides for a permanent exemption due to lack of an alternate fuel supply at a cost which does not substantially exceed the cost of using imported petroleum.

To qualify, the petitioner, pursuant to 10 CFR 503.32(a), must certify that:
(1) A good faith effort has been made to obtain an adequate and reliable supply of an alternate fuel for use as primary energy source of the quality necessary to conform with the design and operational requirements of the proposed unit;
(2) The cost of using such a supply would substantially exceed the cost of using imported petroleum as a primary energy source during the useful life of the proposed unit as defined in § 503.6 (cost calculation) of the regulations;
(3) No alternate power supply exists, as required under § 503.8 of the regulations;
(4) Use of mixtures is not feasible, as required under § 503.9 of the regulations; and
(5) Alternate sites are not available, as required under § 503.11 of the regulations.

In accordance with the evidentiary requirements of § 503.32(b) (in addition to the certifications discussed above), the petitioner has included as part of its petition:
1. Exhibits containing the basis for the certifications described above; and
2. An environmental impact analysis, as required under 10 CFR 503.13.

In processing this exemption request, ERA will comply with the requirements of the National Environmental Policy Act of 1969 (NEPA); the Council on Environmental Quality’s implementing regulations, 40 CFR 1500 et seq., and DOE guidelines implementing those regulations, published at 45 FR 20694, March 28, 1980. NEPA compliance may involve the preparation of (1) an Environmental Impact Statement (EIS); (2) an Environmental Assessment; or (3) a memorandum to the file finding that the grant of the requested exemption would not be considered a major Federal action significantly affecting the quality of the environment. If an EIS is determined to be required, EPA will publish a Notice of Intent to prepare an EIS in the Federal Register as soon as practicable. No final action will be taken on the exemption petition until ERA’s NEPA compliance has been completed.

The acceptance of the petition by ERA does not constitute a determination that the petitioner is entitled to the exemption requested. That determination will be based on the entire record of this proceeding, including any comments received during the public comment period provided for in this notice.

Issued in Washington, DC, on April 13, 1987.

Robert L. Davies,
Director, Office of Fuels Programs, Economic Regulatory Administration.
[FR Doc. 87-8718 Filed 4-16-87; 8:45 am]
BILLING CODE 6450-01-M

Energy Information Administration
Changes To Energy Information Reporting and Record-Keeping Requirements

AGENCY: Energy Information Administration, DOE.

ACTION: Notice of changes to the inventory of energy information reporting and record-keeping requirements.

SUMMARY: The Energy Information Administration (EIA) of the Department of Energy (DOE) hereby gives notice to respondents and other interested parties of changes to the inventory of current information collections as defined in the Paperwork Reduction Act of 1980 (Pub. L. 96-511), for which EIA is responsible. DOE management and procurement assistance collections, which are the responsibility of the Office of Management and Administration, are no longer included in these notices.

During the second quarter of fiscal year 1987 (January 1, 1987 through March 31, 1987), changes were made to the October 1, 1986 inventory of DOE information collections, which was published in the Federal Register, 51 FR 37958 (October 27, 1986). Changes made during the first quarter were published in the Federal Register, 52 FR 4519 (February 12, 1987). The second quarter changes are listed below, and include new information collections approved by the Office of Management and Budget (OMB), collections extended, restated, or allowed to expire, and changes to continuing information collections.

For the list of discontinued requirements, the discontinued date is shown instead of the expiration date. If applicable, the appropriate Code of Federal Regulations citation is also listed. For revised information collections, a brief summary of the type of revision is noted.

Information collections not utilizing structured forms are designated by an asterisk (*) placed to the right of the control or form number.

FOR FURTHER INFORMATION CONTACT:
Etta Harris, EI-73, Energy Information Administration, Mall Stop 1H-03, Forrestal Building, 1000 Independence Avenue SW., Washington, DC 20585, (202) 586-2185.

Information on the availability of single, blank information copies of those collections utilizing structured forms may be obtained by contacting the National Energy Information Center, EI-22, Forrestal Building, U.S. Department of Energy, Washington, DC 20585, (202) 576-8000.
### NEW DOE ENERGY INFORMATION COLLECTIONS APPROVED BY OMB

<table>
<thead>
<tr>
<th>DOE No.</th>
<th>Title</th>
<th>OMB control No.</th>
<th>Expiration date</th>
<th>CFR Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CE-63A/B</td>
<td>Annual Solar Thermal Collector Manufacturers Survey and Annual Photovoltaic Module Manufacturers Survey</td>
<td>10050172</td>
<td>12/31/89</td>
<td></td>
</tr>
</tbody>
</table>

### DOE ENERGY INFORMATION COLLECTIONS EXTENDED

<table>
<thead>
<tr>
<th>DOE No.</th>
<th>Title</th>
<th>OMB control No.</th>
<th>Expiration date</th>
<th>CFR Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ERA-424D</td>
<td>Tertiary Project Annual Prepaid Expenses Report Form</td>
<td>10030069</td>
<td>06/30/87</td>
<td>10 CFR Parts 212.78.</td>
</tr>
<tr>
<td>ERA-424D</td>
<td>Imports and Exports of Natural Gas Survey</td>
<td>10030061</td>
<td>01/31/90</td>
<td>10 CFR Parts 205, 500.</td>
</tr>
<tr>
<td>EIA-14</td>
<td>Refineries' Monthly Cost Report</td>
<td>19050125</td>
<td>06/30/87</td>
<td></td>
</tr>
<tr>
<td>EIA-141</td>
<td>National Survey of Fuel Purchases for Vehicles - Purchase Log and Supplementary Questionnaire</td>
<td>19050000</td>
<td>05/31/87</td>
<td></td>
</tr>
<tr>
<td>EIA-182</td>
<td>Domestic Crude Oil First Purchase Report</td>
<td>19050143</td>
<td>06/30/87</td>
<td></td>
</tr>
<tr>
<td>EIA-429</td>
<td>National Survey of Fuel Purchases For Vehicles-Background Questionnaire</td>
<td>19050095</td>
<td>05/31/87</td>
<td></td>
</tr>
<tr>
<td>EIA-457A</td>
<td>Residential Energy Conservation-Survey-Housing Unit Record Sheet</td>
<td>19050092</td>
<td>05/31/87</td>
<td></td>
</tr>
<tr>
<td>EIA-457B</td>
<td>Residential Energy Conservation-Survey-Household Questionnaire</td>
<td>19050092</td>
<td>05/31/87</td>
<td></td>
</tr>
<tr>
<td>EIA-457C</td>
<td>Residential Energy Conservation Survey-Rental Agents</td>
<td>19050092</td>
<td>05/31/87</td>
<td></td>
</tr>
<tr>
<td>EIA-457D</td>
<td>Residential Energy Conservation Survey-Quarterly Survey of Fuel Oil Households</td>
<td>19050092</td>
<td>05/31/87</td>
<td></td>
</tr>
<tr>
<td>EIA-457E</td>
<td>Residential Energy Conservation Survey-Electric Utilities</td>
<td>19050092</td>
<td>05/31/87</td>
<td></td>
</tr>
<tr>
<td>EIA-457F</td>
<td>Residential Energy Conservation Survey-Natural Gas Suppliers</td>
<td>19050092</td>
<td>05/31/87</td>
<td></td>
</tr>
<tr>
<td>EIA-457G</td>
<td>Residential Energy Conservation Survey-Fuel Oil Supplier Form</td>
<td>19050092</td>
<td>05/31/87</td>
<td></td>
</tr>
<tr>
<td>EIA-457H</td>
<td>Residential Energy Conservation Survey-Liquidified Petroleum Gas Suppliers</td>
<td>19050092</td>
<td>05/31/87</td>
<td></td>
</tr>
<tr>
<td>EIA-782A</td>
<td>Monthly Petroleum Product Sales Report</td>
<td>19050141</td>
<td>06/30/87</td>
<td></td>
</tr>
<tr>
<td>EIA-782B</td>
<td>Reseller/Retailer's Monthly Petroleum Product Sales Report</td>
<td>19050139</td>
<td>06/30/87</td>
<td></td>
</tr>
<tr>
<td>EIA-782C</td>
<td>Monthly Report of Petroleum Products Sold into States for Consumption</td>
<td>19050140</td>
<td>06/30/87</td>
<td></td>
</tr>
<tr>
<td>EIA-821</td>
<td>Annual Fuel Oil and Kerosene Sales Report</td>
<td>19050019</td>
<td>07/31/87</td>
<td></td>
</tr>
<tr>
<td>EIA-956</td>
<td>Monthly Foreign Crude Oil Acquisition Report</td>
<td>19050186</td>
<td>06/30/87</td>
<td></td>
</tr>
</tbody>
</table>

* Does not utilize a structured form.

### REINSTATED DOE ENERGY INFORMATION COLLECTIONS

<table>
<thead>
<tr>
<th>DOE No.</th>
<th>Title</th>
<th>OMB control No.</th>
<th>Expiration date</th>
<th>CFR citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>EIA-101</td>
<td>Energy Information Administration:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EIA-101</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* *Does not utilize a structured form.

### DOE ENERGY INFORMATION COLLECTIONS DISCONTINUED OR ALLOWED TO EXPIRE

<table>
<thead>
<tr>
<th>DOE No.</th>
<th>Title</th>
<th>OMB control No.</th>
<th>Expiration date</th>
<th>CFR citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>EIA-101</td>
<td>Monthly Electric Bill Data</td>
<td>19050129</td>
<td>03/31/87</td>
<td></td>
</tr>
</tbody>
</table>

* Does not utilize a structured form.

### CHANGES IN CONTINUING DOE ENERGY INFORMATION COLLECTIONS

<table>
<thead>
<tr>
<th>DOE No. as previously listed</th>
<th>Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>FERC-500* and FERC-505*</td>
<td>Notice of Proposed Rulemaking revision to filing requirements as mandated by the Electric Consumers Protection Act of 1986.</td>
</tr>
</tbody>
</table>

* Does not utilize a structured form.

[FR Doc. 87-8720 Filed 4-16-87; 8:45 am]
Federal Energy Regulatory Commission

[Project Nos. 10186-000 et al.]

Hydroelectric Power Applications (Sauk River Hydro et al.): Applications Filed With the Commission

Take notice that the following hydroelectric applications have been filed with the Federal Energy Regulatory Commission and are available for public inspection:

1. Type of Application: Preliminary Permit.
   a. Project No.: 10186-000.
   b. Date Filed: November 24, 1986.
   c. Applicant: Sauk River Hydro.
   d. Name of Project: Snoqualmie Hydro Project.
   f. Location: In Snoqualmie-Mt. Baker National Forest, on Boulder Creek, Snohomish County, Washington. Township 27N and Range 12E.
   g. Filed Pursuant to: Federal Power Act, 16 U.S.C. 791(a)-(825(r).
   h. Contact Person: Lawrence J. McMurtrey, 12122-198th NE., Redmond, WA 98052 (206) 885–3986.
   i. Comment Date: May 14, 1987
   j. Description of Project: The proposed project would consist of: (1) A diversion structure with an inlet elevation of 3,200 feet msl; (2) a penstock 6,200 feet long and 24 inches in diameter leading to; (3) a powerhouse at elevation 1,940 feet msl containing a single turbine/generator unit with a capacity of 3,440 kW operating at 1,560 feet of hydraulic head; and (4) a 3-mile-long, 115-kV transmission line. The applicant estimates that the average annual generation would be 19.04 GWh. The approximate cost of the studies under the permit would be $40,000.
   k. Purpose of Project: Applicant proposes to sell the power generated at the proposed facility.

   1. This notice also consists of the following standard paragraphs: A5, A7 A9, A10, B, C, and D2.

   2. Type of Application: Preliminary Permit.
      a. Project No.: 10211-000.
      b. Date Filed: December 30, 1986.
      c. Applicant: Skykomish River Hydro.
      d. Name of Project: Eagle Creek Project.
      f. Location: In Snoqualmie-Mt. Baker National Forest, on Eagle Creek, King County, Washington. Township 26 N and Range 11E.
      g. Filed Pursuant to: Federal Power Act, 16 U.S.C. 791(a)-(825(r).
      h. Contact Person: Lawrence J. McMurtrey, 12122-198th NE., Redmond, WA 98052 (206) 885–3986.
      i. Comment Date: May 15, 1987
      j. Description of Project: The proposed project would consist of: (1) A diversion structure with an inlet elevation of 2,000 feet msl; (2) a penstock 10,000 feet long and 24 inches in diameter leading to; (3) a powerhouse at elevation 1,400 feet msl containing a single turbine/generator unit with a capacity of 3,440 kW operating at 1,200 feet of hydraulic head; and (4) a 3-mile-long, 115-kV transmission line. The applicant estimates that the average annual generation would be 7.45 GWh. The approximate cost of the studies under the permit would be $40,000.
      k. Purpose of Project: Applicant proposes to sell the power generated at the proposed facility.

   1. This notice also consists of the following standard paragraphs: A5, A7 A9, A10, B, C, and D2.

   3. Type of Application: Preliminary Permit.
      a. Project No.: 10214-000.
      b. Date Filed: December 30, 1986.
      c. Applicant: Skykomish River Hydro.
      d. Name of Project: Evergreen Creek Project.
      f. Location: In Snoqualmie-Mt. Baker National Forest, on Evergreen Creek, Snohomish County, Washington. Township 27N and Range 12E.
      g. Filed Pursuant to: Federal Power Act, 16 U.S.C. 791(a)-(825(r).
      h. Contact Person: Lawrence J. McMurtrey, 12122-198th NE., Redmond, WA 98052 (206) 885–3986.
      i. Comment Date: May 14, 1987
      j. Description of Project: The proposed project would consist of: (1) Four diversion structures with inlet elevations of 2,800 feet msl; (2) four penstocks with a combined length of 9,000 feet and 18 inches in diameter leading to; (3) a power-plant at elevation 1,800 feet msl containing a single turbine/generator unit with a capacity of 1,932 kW operating at 1,000 feet of hydraulic head; and (4) a 9-mile-long, 115-kV transmission line. The applicant estimates the average annual energy production to be 5.86 GWh. The approximate cost of the studies under the permit would be $40,000.
      k. Purpose of Project: Applicant proposes to sell the power generated at the proposed facility.

   1. This notice also consists of the following standard paragraphs: A5, A7 A9, A10, B, C, and D2.

   5. Type of Application: Preliminary Permit.
      a. Project No.: 10214-000.
      b. Date Filed: December 30, 1986.
      c. Applicant: Skykomish River Hydro.
      d. Name of Project: Evergreen Creek Project.
      e. Name of Project: Boulder Creek Project.
      f. Location: In Snoqualmie-Mt. Baker National Forest, on Boulder Creek, Snohomish County, Washington. Township 27N and Range 12E.
      g. Filed Pursuant to: Federal Power Act, 16 U.S.C. 791(a)-(825(r).
      h. Contact Person: Lawrence J. McMurtrey, 12122-198th NE., Redmond, WA 98052 (206) 885–3986.
      i. Comment Date: May 14, 1987
      j. Description of Project: The proposed project would consist of: (1) Four diversion structures with inlet elevations of 3,200 feet msl; (2) four penstocks with a combined length of 3,000 feet; (3) a bifurcated penstock 10,000 feet long and 30 inches in diameter leading to; (3) a powerhouse at elevation 2,200 feet msl containing a single turbine/generator unit with a capacity of 1,701 kW operating at 800 feet of hydraulic head; and (4) a 10-mile-long, 115-kV transmission line. The applicant estimates the average annual energy production to be 7.45 GWh. The approximate cost of the studies under the permit would be $40,000.
k. Purpose of Project: Applicant proposes to sell the power generated at the proposed facility.

I. This notice also consists of the following standard paragraphs: A5, A7 A9, A10, B, C, and D2.

6a. Type of Application: Preliminary Permit.
b. Project No.: 10260-000.
c. Date Filed: January 28, 1987
d. Applicant: Washington Hydro Development Company.

e. Name of Project: Jackman Creek.
h. Contact Person: Mr. Lawrence J. McMurtrey, 12122-196th Avenue, NE., Redmond, WA 98052, (206) 885-3986.
i. Comment Date: May 14, 1987

j. Description of Project: The proposed run-of-the-river project would consist of:

(1) A 36-inch-wide concrete intake structure buried in the stream at elevation 1,500 feet; (2) a 15,000-foot-long, 120-inch-diameter penstock; (3) a powerhouse containing one generating unit with a rated capacity of 9,958 kW; and (4) a 2-mile-long transmission line.

Applicant estimates the average annual energy production to be 48.09 GWh and the estimated cost of the work to be performed under the preliminary permit to be $40,000.

k. Purpose of Project: The power produced is to be sold to the local power company.

I. This notice also consists of the following standard paragraphs: A5, A7 A9, A10, B, C and D2.

7a. Type of Application: Preliminary Permit.
b. Project No.: 10270-000.
c. Date Filed: January 28, 1987
d. Applicant: Washington Hydro Development Company.

e. Name of Project: Hatchery Creek.
h. Contact Person: Mr. Lawrence J. McMurtrey, 12122-196th Avenue, NE., Redmond, WA 98052, (206) 885-3986.
i. Comment Date: May 14, 1987

j. Description of Project: The proposed run-of-the-river project would consist of:

(1) A 36-inch-wide concrete intake structure buried in the stream at elevation 1,600 feet; (2) a 6,000-foot-long, 48-inch-diameter penstock; (3) a powerhouse containing one generating unit with a rated capacity of 2,430 kW; and (4) a 10-mile-long transmission line.

Applicant estimates the average annual energy production to be 10.64 GWh and the cost of the work to be performed under the preliminary permit to be $40,000.

k. Purpose of Project: The power produced is to be sold to the local power company.

I. This notice also consists of the following standard paragraphs: A5, A7 A9, A10, B, C and D2.

9a. Type of Application: Preliminary Permit.
b. Project No.: 10307-000.
c. Date Filed: January 30, 1987
d. Applicant: Washington Hydro Development Company.

e. Name of Project: Quartz Creek Project.
f. Location: In Snoqualmie-Mt. Baker National Forest, on Quartz Creek, Skagit County, Washington, Township 35N and Range 7E.
h. Contact Person: Mr. Lawrence J. McMurtrey, 12122-196th Avenue, NE., Redmond, WA 98052, (206) 885-3986.
i. Comment Date: May 15, 1987

j. Description of Project: The proposed project would consist of:

(1) A diversion structure with an inlet elevation of 1,200 feet msl; (2) a penstock 7,000 feet long and 18 inches in diameter leading to; (3) a powerplant at elevation 300 feet msl containing a single turbine/generator unit with a capacity of 1,207 kW operating at 900 feet of hydraulic head; and (4) a 2-mile-long, 115-kV transmission line. The applicant estimates the average annual energy production to be 5.28 GWh. The approximate cost of the studies under the permit would be $40,000.

k. Purpose of Project: Applicant intends to sell the power generated at the proposed facility.

I. This notice also consists of the following standard paragraphs: A5, A7 A9, A10, B, C and D2.

10a. Type of Application: Preliminary Permit.
b. Project No.: 10317-000.
c. Date Filed: February 3, 1987
d. Applicant: Nooksack River Hydro.

e. Name of Project: Clearwater Creek.
h. Contact Person: Mr. Lawrence J. McMurtrey, 12122-196th Avenue, NE., Redmond, WA 98052, (206) 885-3986.
i. Comment Date: May 14, 1987

j. Description of Project: The proposed run-of-the-river project would consist of:

(1) A 36-inch-wide concrete intake structure buried in the stream at elevation 2,500 feet; (2) a 27,000-foot-long, 84-inch-diameter penstock; (3) a powerhouse containing one generating unit with a rated capacity of 3,768 kW; and (4) a 5-mile-long transmission line.

Applicant estimates the average annual energy production to be 25.27 GWh and the estimated cost of the work to be performed under the preliminary permit to be $40,000.

k. Purpose of Project: The power produced is to be sold to the local power company.

I. This notice also consists of the following standard paragraphs: A5, A7 A9, A10, B, C and D2.

11a. Type of Application: Minor License.
b. Project No.: 6451-003.
c. Date Filed: June 30, 1986
d. Applicant: Thornton N. Snider.

e. Name of Project: San Antonio Creek Hydroelectric Project.

f. Location: On San Antonio Creek, near town of Sheep Ranch, in Calaveras County, California (In sections 2, 3, 9 and 10 T4N, R14E, MDB&M).
h. Contact Person: Mr. Thornton N. Snider, P.O. Box 870, Turlock, CA 95380.
i. Comment Date: June 5, 1987
j. Description of Project: The proposed project would consist of: (1) A 6-foot-high, 97-foot-long diversion dam at an elevation of 2,650 feet m.s.l.; (2) a 24-inch-diameter, 5,500-foot-long penstock; (3) a powerhouse containing one generating unit with a rated capacity of 400 kW operating under a head of 398 feet; (4) a 12-kV 1-mile-long transmission line; and (5) a 12-kV 1-mile-long existing transmission line owned by Pacific Gas and Electric Company (PG&E) to be reconductored. The estimated 1.24 GWh energy generated by the proposed project would be sold to PG&E. No recreational facilities are proposed by the applicant. The project cost is estimated to be $900,000.

k. This notice also consists of the following standard paragraphs: A3, A9, B, C, and D1.

12 a. Type of Application: License (Minor).

b. Project No.: 9214-001.
c. Date Filed: March 24, 1988.
d. Applicant: Provo Hydro Associates.
e. Name of Project: Murdock Dam

f. Location: On Provo River in Utah County, Utah: Section 6, T6S, R3E, SLB&M.


h. Contact Person: Mr. Michael J. Graham, P.O. Box N, Manti, UT 84642.

i. Comment Date: June 3, 1987

j. Description of Project: The proposed project would utilize the existing U.S. Bureau of Reclamation's Murdock Dam and Reservoir and would consist of: (1) A 60-inch-diameter, 6-foot-long penstock; (2) a powerhouse with an installed capacity of 200 kW under a head of 23 feet; (3) a tailrace returning flow to the Provo River; (4) an underground 12.5-kV transmission line, about 100 feet long; and (5) appurtenant facilities. The applicant estimates that the average annual energy output would be 1,178,373 kWh.

k. Purpose of Project: Project energy would be sold to the local power company.

l. This notice also consists of the following standard paragraphs: A3, A9, B, C, and D1.

13 a. Type of Application: Preliminary Permit.

b. Project No.: 10197-000.
c. Date Filed: November 24, 1986.
d. Applicant: Skykomish River Hydro.
e. Name of Project: Skykomish Tributaries.


h. Contact Person: Mr. Lawrence J. McMurtrey, 12122-190th Avenue, NE., Redmond, WA 98052, (206) 885-3986.

i. Comment Date: June 3, 1987

j. Description of Project: The proposed run-of-the-river project would consist of: (1) A 36-inch-wide concrete intake structure buried in the stream at an elevation of 2,000 feet; (2) a 20,349-foot-long, 24-inch-diameter penstock; (3) a powerhouse containing one generating unit with a rated capacity of 4,408 kW; and (4) a 3-mile-long transmission line. Applicant estimate the average annual energy production to be 23 GWh and the cost of the work to be performed under the preliminary permit to be $40,000.

k. Purpose of Project: The power produced is to be sold to the local power company.

l. This notice also consists of the following standard paragraphs: A5, A7, A9, A10, B, C, and D2.

14 a. Type of Application: Preliminary Permit.

b. Project No.: 10272-000.
c. Date Filed: January 28, 1987

d. Applicant: Washington Hydro Development Company.

e. Name of Project: Thunder Creek.


h. Contact Person: Mr. Lawrence J. McMurtrey, 12122-190th Avenue, NE., Redmond, WA 98052, (206) 885-3986.

i. Comment Date: June 4, 1987

j. Description of Project: The proposed run-of-the-river project would consist of: (1) Three 36-inch-wide concrete intake structure buried in the stream at an elevation of 2,000 feet; (2) a 10,000-foot-long, 72-inch-diameter penstock; (3) a powerhouse containing one generating unit with a rated capacity of 2,494 kW; and (4) a 3-mile-long transmission line. Applicant estimates the average annual energy production to be 10.9 GWh and the cost of the work to be performed under the preliminary permit to be $40,000.

k. Purpose of Project: The power produced is to be sold to the local power company.

l. This notice also consists of the following standard paragraphs: A5, A7, A9, A10, B, C, and D2.

15 a. Type of Application: Preliminary Permit.

b. Project No.: 10160-000.
c. Date Filed: November 4, 1986.
d. Applicant: Public Utility District No. 1, Mason County, Washington.

e. Name of Project: Hamma Hamma.


h. Contact Person: John Robertson, Manager, Public Utility District No. 1, of Mason County, Washington, North 21971 Highway 101, Shelton, WA 98584 (206) 877-5249.

Ed Blakemore, Manager, Public Utility District No. 3 of Mason County, Washington, 303 West Costa, Shelton, WA 98584 (206) 426-8255.

Mr. Benjamin H. Settle, Houston Settle and Whitehouse, P.O. Box 1400, Angle Building, Shelton, WA 98584.

Mr. Albert Liou, Project Manager, Hosey and Associates Engineering Company, Northup West Office Park, Suite 190, 2820 Northup Way, Bellevue, WA 98004.

i. Comment Date: June 12, 1987.

j. Description of Project: The propose project would consist of: (1) A 22-foot-high, 205-foot-long diversion dam at an elevation of 27-foot, with a concrete-type spillway located in the center of the dam, above Hamma Hamma Falls, creating; (2) a 5-acre impoundment with a storage capacity of 20 acre-feet; (3) a 22-foot by 20-foot intake structure with trashracks, an emergency closure gate, a sluice gate, fish screens, and bypass system, located on the right abutment of the dam; (4) a 5,000-foot-long tunnel, to include a vertical shaft, with a diameter varying from 10 feet to 12 feet; (5) a powerhouse containing two generating units with a total installed capacity of 17 MW, producing an average annual energy output of 69,200,000 kWh; (6) a 15-foot-wide, 1.5-mile-long access road from the existing logging road to the powerhouse; and (7) a 1,900-foot-long, 115-kV transmission line tyung into an existing Bonneville Power Authority System. No new access road will be needed to conduct the studies. The Applicant estimates that the cost of the studies to be conducted under the preliminary permit would be $20,000.

k. Purpose of Project: Project power produced by the project will be used to meet the Applicant's load growth, or to offset power purchases now being made by the applicants to supply their customers.

l. This notice also consists of the following standard paragraphs: A5, A7, A9, A10, B, C, and D2.
A3. Development Application—Any qualified development applicant desiring to file a competing application must submit to the Commission, on or before the specified comment date for the particular application, a competing development application, or a notice of intent to file such an application. Submission of a timely notice of intent allows an interested person to file the competing development application no later than 120 days after the specified comment date for the particular application. Applications for preliminary permit will not be accepted in response to this notice.

A5. Preliminary Permit—Anyone desiring to file a competing application for preliminary permit for a proposed project must submit the competing application itself, or a notice of intent to file such an application, to the Commission on or before the specified comment date for the particular application (see 18 CFR 4.36 (1986)). Submission of a timely notice of intent allows an interested person to file the competing preliminary permit application no later than 30 days after the specified comment date for the particular application. A competing preliminary permit application must conform with 18 CFR 4.30(b)(1) and 4.36.

A7 Preliminary Permit—Any qualified development applicant desiring to file a competing development application must submit to the Commission, on or before the specified comment date for the particular application, either a competing development application or a notice of intent to file such an application. Submission of a timely notice of intent to file a development application allows an interested person to file the competing application no later than 120 days after the specified comment date for the particular application.

A8. Preliminary Permit—Public notice of the filing of the initial preliminary permit application, which has already been given, established the due date for filing competing preliminary permit and development applications or notices of intent. Any competing preliminary permit or development application, or notice of intent to file a competing preliminary permit or development application, must be filed in response to and in compliance with the public notice of the initial preliminary permit application. No competing applications or notices of intent to file competing applications may be filed in response to this notice.

A9. Notice of intent—A notice of intent must specify the exact name, business address, and telephone number of the prospective applicant, include an unequivocal statement of intent to submit, if such an application may be filed, either (1) a preliminary permit application or (2) a development application (specify which type of application), and be served on the applicant(s) named in this public notice. A competing license application must conform with 18 CFR 4.30(b) (1) and (9) and 4.36.

A10. Proposed Scope of Studies Under Permit—A preliminary permit, if issued, does not authorize construction. The term of the proposed preliminary permit would be 36 months. The work proposed under the preliminary permit would include economic analysis, preparation of preliminary engineering plans, and a study of environmental impacts. Based on the results of these studies the Applicant would decide whether to proceed with the preparation of a development application to construct and operate the project.

B. Comments, Protests, or Motions to Intervene—Anyone may submit comments, a protest, or a motion to intervene in accordance with the requirements of the rules of practice and procedure, 18 CFR 385.210, 385.211, 385.214. In determining the appropriate action to take, the Commission will consider all protests or other comments filed, but only those who file a motion to intervene in accordance with the Commission’s Rules may become a party to the proceeding. Any comments, protests, or motions to intervene must be received on or before the specified comment date for the particular application.

C. Filing and Service of Responsive Documents—Any filings must bear in all capital letters the title “COMMENTS” “RECOMMENDATIONS FOR TERMS AND CONDITIONS” “NOTICE OF INTENT TO FILE COMPETING APPLICATION” “COMPETING APPLICATION” “PROTEST” or “MOTION TO INTERVENE” as applicable, and the Project Number of the particular application to which the filing is in response. Any of the above named documents must be filed by providing the original and the number of copies required by the Commission’s regulations to: Kenneth F Plumb, Secretary, Federal Energy Regulatory Commission, 823 North Capitol Street, NE., Washington, DC 20426. An additional copy must be sent to: Mr. Fred R. Springer, Director, Division of Project Management, Federal Energy Regulatory Commission, Room 203–RB, at the above address. A copy of any notice of intent, competing application or motion to intervene must also be served upon each representative of the Applicant specified in the particular application.

D1. Agency Comments—States, agencies established pursuant to federal law that have the authority to prepare a comprehensive plan for improving, developing, and conserving a waterway affected by the project, federal and state agencies exercising administration over fish and wildlife, flood control, navigation, irrigation, recreation, cultural and other relevant resources of the state in which the project is located, and affected Indian tribes are requested to provide comments and recommendations for terms and conditions pursuant to the Federal Power Act as amended by the Electric Consumers Protection Act of 1986, the Fish and Wildlife Coordination Act, the Endangered Species Act, the National Historic Preservation Act, the Historical and Archeological Preservation Act, the National Environmental Policy Act, Pub. L. No. 88–29, and other applicable statutes. Recommended terms and conditions must be based on supporting technical data filed with the Commission along with the recommendations, in order to comply with the requirement in section 313(b) of the Federal Power Act, 16 U.S.C. 825t(b), that Commission findings as to facts must be supported by substantial evidence.

All other federal, state, and local agencies that receive this notice through direct mailing from the Commission are requested to provide comments pursuant to the statutes listed above. No other formal requests will be made. Responses should be confined to substantive issues relevant to the issuance of a license. A copy of the application may be obtained directly from the applicant. If an agency does not respond to the Commission within the time set for filing, it will be presumed to have no comments. One copy of an agency’s response must also be set to the Applicant’s representatives.

D2. Agency Comments—Federal, State, and local agencies are invited to file comments on the described application. (A copy of the application may be obtained by agencies directly from the Applicant.) If an agency does not file comments within the time specified for filing comments, it will be presumed to have no comments.
copy of an agency's comments must also be sent to the Applicant's representatives.

Kenneth F. Plumb, Secretary.

[FR Doc. 87-8641 Filed 4-16-87; 8:45 am]
BILLING CODE 6717-01-M

[Docket No. ER87-363-000]
San Diego Gas & Electric Co., Filing
April 9, 1987.

Take notice that on April 3, 1987 San Diego Gas & Electric Company (SDG&E) tendered for filing rate schedule changes to factor the Firm Transmission Service Agreement, Rate Schedule FERC No. 80 (Agreement) between San Diego Gas & Electric Company and Southern California Edison Company (Edison).

Under the terms of the Agreement, SDG&E will make available to Edison firm transmission service between points near the U.S.-Mexico border and San Onofre. The Agreement provides that whenever the California Public Utilities Commission finds a new overall rate of return for SDG&E's retail service to be reasonable and authorizes rates based on such new rate of return to become effective, rates shall be redetermined and assigned an effective date on and after the effective date of such new rate of return. Waiver of the Commission's prior notice requirements is requested for an effective date of January 1, 1987 for changes relating to SDG&E's rate of return. The Agreement also provides that if either party believes that for reasons other than a change in rate of return there has been a significant change in SDG&E's revenue requirements, notice may be given that the rates be redetermined. Waiver of the Commission's prior notice requirements is requested for an effective date of February 1, 1986 for changes relating to SDG&E's revenue requirements.

Copies of this filing were served upon the Public Utilities Commission of the State of California and Edison. Any person desiring to be heard or to protest this application should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE, Washington, DC 20426, in accordance with the Commission's rules of practice and procedure (18 CFR 385.211, 385.214). All such motions or protests should be filed on or before April 23, 1987. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceedings. Any person wishing to become a party must file a motion to intervene. Copies of this application are on file with the Commission and are available for public inspection.

Kenneth F. Plumb, Secretary.

[FR Doc. 87-8642 Filed 4-16-87; 8:45 am]
BILLING CODE 6717-01-M

[Docket No. ER87-384-000]
San Diego Gas & Electric Co., Filing
April 9, 1987.

Take notice that on April 3, 1987 San Diego Gas & Electric Company (SDG&E) tendered for filing rate schedule changes to the following Agreements between SDG&E and Southern California Edison Company (Edison).

1. Short-Term Transmission Service Agreement, Rate Schedule FERC No. 58.
2. Interruptible Transmission Service Agreement, Rate Schedule FERC No. 59.

Under the terms of the Agreement, SDG&E will make available to Edison firm transmission service between points near the U.S.-Mexico border and San Onofre. The Agreements provided that if either party believes that for reasons other than a change in rate of return there has been a significant change in SDG&E's retail service to be reasonable and authorize rates based on such new rate of return to become effective, rates shall be redetermined and assigned an effective date on and after the effective date of such new rate of return. Waiver of the Commission's prior notice requirements is requested for an effective date of January 1, 1987 for changes relating to SDG&E's rate of return.

Finally, the Agreements provide that whenever the California Public Utilities Commission finds a new overall rate of return for SDG&E's retail service to be reasonable and authorizes rates based on such new rate of return to become effective, rates shall be redetermined and assigned an effective date on and after the effective date of such new rate of return. Waiver of the Commission's prior notice requirements is requested for an effective date of January 1, 1987 for changes relating to SDG&E's rate of return.

Copies of this filing were served upon the Public Utilities Commission of the State of California and Edison. Any person desiring to be heard or to protest this application should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 825 North Capitol Street, NE, Washington, DC 20426, in accordance with the Commission's rules of practice and procedure (18 CFR 385.211, 385.214). All such motions or protests should be filed on or before April 23, 1987. Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceedings. Any person wishing to become a party must file a motion to intervene. Copies of this application are on file with the Commission and are available for public inspection.

Kenneth F. Plumb, Secretary.

[FR Doc. 87-8843 Filed 4-16-87; 8:45 am]
BILLING CODE 6717-01-M

Office of Conservation and Renewable Energy

Research and Development Cooperative Ventures; Inquiry and Request for Public Comment


ACTION: Notice of inquiry.

SUMMARY: The Department of Energy (DOE), Office of Conservation and Renewable Energy, is exploring possible interest in the formation of cooperative ventures, consisting of two or more private sector organizations for the purpose of undertaking pre-commercial, applied research and development in conservation and renewable energy technologies. This notice describes the qualifications of such cooperative ventures and requests public comment on the potential for such ventures and issues related to these ventures. Public comment could take the form of detailed suggestions for cooperative R&D ventures in specific technology areas.

DATE: Written responses should be submitted no later than May 18, 1987

ADDRESSES: For submission of public comments: Mrs Ana M. Larkin, Special Assistant to the Assistant Secretary, Conservation and Renewable Energy, CE-1, U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585.
Introduction

The United States Department of Energy (DOE), Office of Conservation and Renewable Energy (CE), is announcing its interest in promoting establishment of energy research and development (R&D) cooperative ventures to complement current CE contract and operating mechanisms and to promote public-private collaboration in applied research and development.

DOE/CE will analyze the information submitted in response to this notice in determining whether and how to proceed. It should be emphasized that DOE is not soliciting proposals with this announcement and will not fund any activities proposed at this time. DOE will not reimburse any expenses incurred in responding to this announcement.

Discussion

The Department will not place tight constraints on the types of cooperative opportunities to be considered, and intends to be flexible in dealing with such questions as intellectual property rights to the extent allowed by law. The form or organizational structure through which industry could cooperate with the Federal government also remains open and flexible. This approach should allow industry to join in a form of business organization that will serve to achieve its R&D goals and objectives. However, DOE will conduct technical and business evaluations to determine, whether and to what extent to participate in any venture. Commenters are invited to make suggestions regarding subjects on which DOE flexibility would be desirable. If existing authorities would have to be modified to accommodate a suggestion (e.g., 42 U.S.C. 5806(b)), DOE is prepared to consider both the appropriateness and potential costs and benefits of seeking such a modification.

If proposals are ultimately invited, it has been determined that they must contemplate the participation of a minimum of two private sector entities, consistent with the National Cooperative Research Act of 1984 (15 U.S.C. 4301 et seq.). Further, DOE does not plan to participate in excess of 49% of project cost and thus expects more than 100% leveraging of Federal funds. The DOE contribution should not displace support that would otherwise be forthcoming from private funding. If the venture proves financially successful, the Federal government plans to share in royalties or other profits from it in proportion to the Federal contribution.

DOE anticipates that energy R&D cooperative ventures may be able to qualify for limited protection from antitrust lawsuits by complying with the procedures of the National Cooperative Research Act of 1984 (15 U.S.C. 4301 et seq.). Under that Act, a "joint research and development venture" is protected from treble damage suits and its joint activities cannot be deemed illegal per se if the venture meets the qualifications set forth in the Act and files an appropriate notice with the U.S. Department of Justice and the Federal Trade Commission. The protection provided by the Act is not absolute because activities violative of the rule of reason are still actionable.

The Department is interested in soliciting comments and discussion of other elements critical to the establishment of cooperative ventures relating to operations and financing such as:

- Management structure
- R&D decision-making structure
- Organization financing and
- Management of intellectual property

The following are a number of questions which we would like interested parties to address.

1. What should be the role of the federal government and federally supported laboratories and research centers?
2. How would you propose to cost-share in a cooperative arrangement?
What minimum Federal investment would be required?

The following is a detailed description of some areas CE will consider as cooperative R&D areas:

Representative Technology Opportunities

DOE/CE remains open in considering the opportunities and appropriateness of cooperative R&D ventures in many technology areas. This section provides selected examples of applied R&D areas where there is already considerable industry involvement in the DOE/CE programs, and which might be appropriately pursued through cooperative R&D ventures. This list is not intended to be exclusive and CE would be interested in exploring opportunities in other areas:

a. Industrial Process Efficiency

The Paper Industry

Both from an energy efficiency and from a competitiveness perspective many areas in industrial energy use might warrant attention. One example is the paper industry which consumes 2.2 quads annually. Kraft Black Liquor Gasification which could replace existing Tomlinson furnaces which consumes an estimated 0.8 quads of energy annually and improve energy efficiency by 15%. This could be done through gasification of Kraft Black Liquor and use of the product gases as fuel for combined cycle gas turbine cogeneration to produce electricity and process steam. This technology can potentially improve the efficiency and safety of combusting black liquor, reducing capital and operating costs, increasing electrical power output, and providing an economical system for incremental Kraft capacity additions.

Steel Industry Technology

The steel industry presently consumes 1.6 quads of energy annually, which could be reduced by up to 30%. Current government efforts support a range of applied steel research. A wide range of steel industry technology needs have been identified by industry and government researchers including:

- The reduction of domestic raw materials to liquid steel
- The production of near-net shape, solids from liquid steel
- The development of universal grades of steel
- The application of automatic processing technology

Opportunities remain for energy productivity improvements which would also result in significant economic efficiency gains.

b. Buildings and Insulation Materials

Roof Conservation Technology

An estimated 0.7 quad of energy is wasted each year because of poor design and construction and some $10 billion is spent annually on new roofs...
and reroofing construction. Because the average life of a roof is between eight and ten years, there is an opportunity for relatively rapid introduction of new energy-efficient materials and designs with particular emphasis on the commercial sector.

A facility is now being constructed at Oak Ridge National Laboratory which can act as the basis for a Roof Research Center. The center is being developed as a DOE-User facility which will be available to private manufacturers and designers for conducting research. The Center would develop an improved scientific and technical basis for the design and development of improved energy efficient roof systems. Cost-shared R&D involving the operation and use of the center is a possible subject for an energy R&D cooperative venture.

Glazing Materials

Present passive solar designs can contribute approximately 35% of the energy needs of a building, principally in the area of space heating. Advanced glazing materials could increase this contribution to 50 to 70 percent by offering both improved insulation value and a great contribution to natural lighting (daylighting) which reduces the electrical demands of a building.

A number of approaches have been taken including: fabrication of new types of glass and glass coatings, novel window construction techniques, development of thin films to improve spectral sensitivity, heat-trapping, and re-direction of the incident light for better daylighting and development of "switchable" glazing that allow the light and heat transmission properties of windows to be controlled. Producers of glass and other window materials are possible participants in cooperative R&D to conduct research necessary to build upon current progress in these areas.

Ceramics Technology Advanced Manufacturing Development and Engineering

Recent studies have concluded that the U.S.'s lead in high-performance ceramics is being threatened because of the strong challenge from foreign competitors. This challenge is in part due to industry/government/university programs to commercialize ceramic materials. Several possible needs have been identified, including creation of a center for interdisciplinary work on the processing of advanced ceramics which could: conduct generic manufacturing engineering development on the processing of advanced ceramic materials and develop and demonstrate advanced techniques for integrating highly automated manufacturing technology with ceramic processing.

Solid State Power Conditioning

Power conditioning in photovoltaics (PV) is the process for converting dc electricity to reliable, efficient, and economic ac power. The current generation of technology operates at efficiencies of about 90%, lasts ten years, and cost $40/Wp. For photovoltaic systems to produce cost competitive electricity, efficiencies must be improved 10% and costs must be reduced to a range of $12-$30/Wp depending on size, through improved configurations and designs that improve manufacturability and performance. Large-scale power conditioning devices can also be used extensively in electric power systems, thus providing a substantial conventional energy contribution in addition to furthering the goal of producing competitive PV power. They can also be used at small-scale in the control of many electrical loads to protect interruptable power supplies and control speed drives for efficient electric motor operation.

Geothermal Technology Development

State-of-the-art geothermal exploration technology is not yet adequate to define locations and characteristics of hydrothermal reservoirs associated with young volcanic areas. In addition 80 percent of geothermal reservoirs are not hot enough for electric power production using conventional high temperature generators. Increases in the efficiency of binary cycle energy conversion systems would move these reservoirs toward economic feasibility. Industry groups working with government researchers have identified substantial potential payoffs associated with research aimed at improved reservoir assessment technology; the development of inline instruments to measure important fluid properties continuously during plant operations; and the development of advanced binary power cycles which use non-aqueous working fluids to produce electric power from lower temperature geothermal resources.

Issued in Washington, DC, on April 1, 1987.

Donna R. Fitzpatrick,
Assistant Secretary, Conservation and Renewable Energy.

[FR Doc. 87-8851 Filed 4-18-87; 8:45 am]

BILLING CODE 6450-01-M

ENVIRONMENTAL PROTECTION AGENCY

[ER-FRL-3199-4]

Environmental Impact Statements; Availability


EIS No. 870122, Final, FHW, CA, Pacific Coast Highway/CA-1 Widening, CA-55 to Golden West Street, Orange County, Due: May 18, 1987. Contact: Glenn Clinton (916) 551-1310.

EIS No. 870123, Final, FHW, CO, US 50 Improvement, East of Limon to Windy Point, Montrose and Gunnison Counties, Due: May 18, 1987. Contact: Dennis Scovill (303) 238-3382.


Amended Notices

EIS No. 870079, Draft, SCS, WY, Big Sandy River Unit, Irrigation Improvements, Colorado River Salinity Control Program, Contact: Frank Dickson (307) 261-5201. Published FR 3-13-87—Incorrect phone number.
EIS No. 870118, Final FHW, CO, CO-7/Forest Highway 26 Reconstruction, Meeker Park to US 36 in Estes Park, Boulder and Larimer Counties, Due: May 1987 Published FR 14-17-87—Review period reestablished
EIS No. 870107 Final, NPS, NY, PA, Upper Delaware Scenic and Recreational River Management Plan, Due: May 11, 1987 Published FR 4-03-87—Review period reestablished

Richard E. Sanderson,
Director, Office of Federal Activities.

[FR Doc. 87-702 Filed 4-18-87; 8:45 am]
BILLING CODE 4560-50-M

[ER-FRL-3188-5]

Environmental Impact Statements and Regulations; Availability of EPA Comments

Availability of EPA comments prepared March 30, 1987 through April 3, 1987 pursuant to the Environmental Review Process (ERP), under section 309 of the Clean Air Act (CAA) and Section 102(2)(c) of the National Environmental Policy Act (NEPA) as amended. Requests for copies of EPA comments can be directed to the Office of Federal Activities at (202) 382-5076/73. An explanation of the ratings assigned to draft environmental impact statements (EISs) was published in FR dated February 7, 1986 (51 FR 4804).

Draft EISs

ERP No. DS-BLM-K30312-TX, Rating LO, All American Crude Oil Pipeline Project, Construction and Operation, Texas Extension, Sect. 404 and 10 Permits, TX. Summary: EPA has no objections to the BLMs preferred alternative. EPA finds this route to be the best choice from both an operational and environmental standpoint since it will significantly minimize potential adverse impacts. EPA considers the applicants route to be inadvisable.

ERP No. DS-FHW-E40148-NC, Rating LO, US 74/Independence Blvd. Corridor Improvements, Mecklenburg Co. to Uptown Charlotte, Additional Alternatives, NC. Summary: EPA has no major objections subject to the implementation of the proposed mitigation. EPA suggested that the supplemental final EIS include a stronger commitment to fund and construct noise barriers.

ERP No. D-FHW-F40289-MN, Rating EC2, US TI-189/Cross Range Expressway Improvement, US TH-2 in Grand Rapids to MN TH-65 in Pencilly, 404 Permit, MN. Summary: EPA is concerned about loss of wetlands and the potential for stormwater retention areas to contaminate aquifers. EPA recommended that the final EIS contain specific wetland mitigation plans and more information regarding the project area’s hydrogeology.

ERP No. DB-FHW-K40016-CA, Rating LO, CA-710/Long Beach Freeway (Formerly CA-7) Construction, I-10/San Bernardino Freeway to I-210/Poohill Freeway, Meridian Variation Alternative, CA. Summary: EPA has no objections, but recommended that high occupancy vehicle bypasses and ramp metering be evaluated and that the work plans on potential hazardous waste sites be included in the final EIS.

Final EISs

ERP No. F-AFS-E62053-00, Southern Region, Southern Pine Beetle Suppression Program on Federal and Non-Federal Lands, Wilderness Area, AL, AR, FL, NC, SC, WV OK, TN, TX, and GA. Summary: EPAs draft EIS comments have been adequately addressed. However, further consideration should be given to long term silviculture strategies as an alternative to shorter term intervention. EPA has also asked that appropriate NEPA documentation should be provided for site specific actions.

ERP No. F-BLM-K61058-CA, Central California Study Area, Wilderness Recommendations, Caliente, Folsom, and Hollister Resource Areas, Wilderness Designation Suitability or Non-suitability, CA. Summary: EPA expressed concerns that the water quality analysis in the final EIS was inadequate, and did not address the issues EPA had raised in 1982 on the draft EIS. EPA requested that the Record of Decision fully describe what monitoring plans and mitigation measures BLM will implement to protect water quality.

ERP No. FS-FHW-D40119-VA Springfield Bypass and Extension, I-66 to the Braddock Rd./VA-620 Intersection, Construction, Updated Alternative Information, VA. Summary: EPA has no objections to the development and implementation of the project, as proposed. EPA’s previous concerns have been addressed.

Amended Notices

The following reviews should have appeared in the FR Notice published on March 27, 1987 and April 3, 1987 respectively.

ERP No. ER-AFS-L85108-00, Rating EC2, Olympic Natl Forest, Land and Resource Mgmt. Plan, WA. Summary: EPA believes that the process for managing forest activities is not clear enough to assure that adverse environmental effects, particularly to water quality and fisheries, will be prevented.

ERP No. FS-COE-C32009-00, Newark Bay and Kill Van Kull Navigation Channel Improvements, Additional Information, Aquatic Population, Sediment Quality, Hydraulic Impacts, and Disposal Alternatives Update, NJ and NY. Summary: EPA disagrees with the COE intention, as stated in the supplemental final EIS, that project material is suitable for unrestricted ocean disposal. However, EPA will not object to the project based on the condition that the COE cap project material with suitable clean material.

Richard E. Sanderson,
Director, Office of Federal Activities.

[FR Doc. 87-703 Filed 4-18-87; 8:45 am]
BILLING CODE 4560-50-M

[OPP-180731; FRL-3189-3]

Receipt of Application for an Emergency Exemption From California To Use Benomyl; Solicitation of Public Comment

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: EPA has received a specific exemption request from the California Department of Food and Agriculture (hereafter referred to as “Applicant”) to use the fungicide benomyl to control Septoria petroselinii on 5,000 acres of parsley (fresh market and processed).

EPA, in accordance with 40 CFR 166.24, is required to issue a notice of receipt and solicit public comment before making the decision whether to grant the exemption.

DATE: Comments should be received on or before April 27, 1987

ADDRESS: Three copies of written comments, bearing the identification notation “OPP-180731” should be submitted by mail to:

Information Services Section, Program Management and Support Division (TS-757C), Office of Pesticide Programs, Environmental Protection Agency, 401 M Street SW., Washington, DC 20460

In person, bring comments to: Rm. 236, CM #2, 1212 Jefferson Davis Highway, Arlington, VA.

Information submitted in any comment concerning this notice may be claimed confidential by marking any part or all of that information as
“Confidential Business Information.” Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR Part 2. A copy of the comment that does not contain Confidential Business Information must be provided by the submitter for inclusion in the public record. Information not marked confidential may be disclosed publicly by EPA without prior notice. All written comments filed pursuant to this notice will be available for public inspection in Room 236, Crystal Mall No. 2, 2021 Jefferson Davis Highway, Arlington, VA, from 8 a.m. to 4 p.m., Monday through Friday except legal holidays.


SUPPLEMENTARY INFORMATION: Pursuant to section 18 of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (7 U.S.C. 136p), the Administrator may, at his discretion, exempt a State agency from any registration provision of FIFRA if he determines that emergency conditions exist which require such exemption.

The Applicant has requested the Administrator to issue a specific exemption to permit use of the fungicide benomyl (CAS 17804–35–2) to control late blight on parsley.

Information in accordance with 40 CFR Part 166 was submitted as part of this request. Late blight of parsley is caused by the fungus, Septoria petroselini. The fungus penetrates the cell directly causing small chlorotic spots to form on the leaves. As the tissue in these spots dies, pyzumia of the fung become very evident as small black bodies visible to the naked eye. These infections can render the parsley unmarketable for processing or the fresh market. Environmental conditions determine whether the disease will become epidemic. Dry spring weather in 1984, 1985, and 1986 kept losses to late blight to a minimum. Heavy rain in March and April of 1983 caused some growers to lose 20% of their crop. The Applicant has requested an emergency exemption for the use of benomyl to provide parsley growers, a means of controlling late blight in the event that environmental conditions are favorable for its development.

The Applicant is proposing to make a single application of benomyl by ground or air application equipment at a rate of 0.5 pound active ingredient (1 pounds product) per acre during the growing season. A 21-day preharvest interval will be observed.

This notice does not constitute a decision by EPA on this application. The regulations governing section 18 require publication of a notice in the Federal Register of receipt of an application for a specific exemption proposing use of a pesticide which contains an active ingredient which has been the subject of a Special Review and is intended for a use that could pose a risk similar to the risk posed by any use of a pesticide which is or has been the subject of a Special Review (40 CFR 166.24(a)(5)). A Decision Document (Final Resolution of Rebuttable Presumption Against Registration) for benomyl was issued October 20, 1982 (47 FR 46747). The risks considered in that document, which could be similar to the risks posed by this proposed use, were oncogenicity; teratogenicity; mutagenicity; and spermatotoxic risks. The Agency determined that the benefits associated with the use of benomyl products exceeded the risks when a dusk mask was used by applicators during mixing and loading of benomyl for aerial application.

Accordingly, interested persons may submit written views on this subject to the Program Management and Support Division at the address given above. The Agency will review and consider all comments received during the comment period in determining whether to issue this emergency exemption request.


Edwin F. Tinsworth,
Director, Registration Division, Office of Pesticide Programs.
[FR Doc. 87–8679 Filed 4–16–87; 8:45 am]
BILLING CODE 6560–50–M

[OPP–180733; FRL–3189–4]

Receipt of Applications for Emergency Exemptions From Washington and Oregon To Use Dinoseb; Solicitation of Public Comment

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of receipt.

SUMMARY: EPA has received specific exemption requests from the Washington and Oregon Departments of Agriculture (hereafter referred to as "Washington, "Oregon," or collectively as "Applicants") to use dinoseb (CAS 89–65–7). Washington proposes to use dinoseb on cucumbers and snap beans to control broadleaf weeds and on raspberries to control excess vegetation. Oregon proposes to use dinoseb on green peas, snap beans, caneberrries, squash, pumpkins, and cucumbers to control broadleaf weeds and/or for chemical pruning. EPA, in accordance with 40 CFR 166.24, is required to issue a notice of receipt and, time permitting, to solicit public comment before making the decision whether to grant the exemptions.

On April 1, 1987 the Administrator declined to hold a hearing under Subpart D with respect to the use of dinoseb on green peas and snap beans resulting in the denial of these requests.

DATE: Comments must be received on or before May 4, 1987

ADDRESS: Three copies of written comments, bearing the identification notation "OPP–180733" should be submitted by mail to:

Information Service Section, Program Management and Support Division (TS–757C), Office of Pesticide Programs, Environmental Protection Agency, 401 M Street SW., Washington, DC 20460

In person, bring comments to: Room 236, CM#2, 2021 Jefferson Davis Highway, Arlington, VA.

Information submitted in any comment concerning this notice may be claimed confidential by marking any part or all of that information as "Confidential Business Information." Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR Part 2. A copy of the comment that does not contain Confidential Business Information must be provided by the submitter for inclusion in the public record. Information not marked confidential may be disclosed publicly by EPA without prior notice. All written comments filed pursuant to this notice will be available for public inspection in Room 236, Crystal Mall No. 2, 2021 Jefferson Davis Highway, Arlington, VA, from 8 a.m. to 4 p.m., Monday through Friday, except legal holidays.

FOR FURTHER INFORMATION CONTACT:
By mail: Donald R. Stubbs, Registration Division (TS–767C), Office of Pesticide Programs, Environmental Protection Agency, 401 M Street SW., Washington, DC 20460.

SUPPLEMENTARY INFORMATION:

I. Background

Pursuant to section 18 of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) [7 U.S.C. 136p], the Administrator may, at his discretion, exempt a State or Federal agency from any provision of FIFRA if he determines that emergency conditions exist which require such exemption. The applicable EPA regulations for emergency exemptions are set forth at 40 CFR Part 166.

The Department of Agriculture for the state of Oregon, by letter received February 17 1987 has requested the Administrator to issue specific exemptions for the use of dinoseb on green peas, snap beans, pumpkins, and cucumbers to control broadleaf weeds and for basal burning of caneberry cane. Oregon has also requested use of dinoseb on dry peas, chickpeas and lentils; these requests will be discussed in a separate notice. The Department of Agriculture for the State of Washington, by letters received March 17, 1987 has requested the Administrator to issue specific exemptions for the use of dinoseb on cucumbers and snap beans to control broadleaf weeds and on raspberries to control excess vegetation.

On October 7 1986, EPA suspended all registrations of dinoseb products (51 FR 30634, October 14, 1986). The basis for the suspension of all dinoseb registrations was significant risk of developmental toxicity and other adverse health effects to applicators and other populations exposed to dinoseb. Subsequent requests submitted for an expedited suspension hearing on the question of whether or not sale, distribution, or use of dinoseb would pose an imminent hazard during the time required to conduct a cancellation hearing. These registrants withdrew their expedited hearing requests on the question of imminent hazard on October 30, 1986, resulting in the immediate entry, pursuant to the terms of the Agency’s October 7 decision, of a final order suspending the registrations of their dinoseb products during the pendancy of the cancellation hearing. The Applicants’ specific exemption requests are, therefore, subject to EPA’s Subpart D regulations, 40 CFR 164.130 to 164.133, in addition to the regulations at 40 CFR Part 166 governing the issuance of exemptions under section 18. Subpart D provides that any application for a registration of a pesticide use that has been suspended or cancelled shall be considered a petition for reconsideration of the prior suspension or cancellation order. The Administrator will determine that reconsideration is warranted if, among other things, he finds that the Applicant has presented substantial new evidence which may materially affect the prior suspension or cancellation order (40 CFR 164.131(c)). If the Administrator finds that the substantial new evidence test in 40 CFR 164.131 is met, the Subpart D rules require a formal hearing to determine whether a modification of the suspension or cancellation order is justified (40 CFR 164.131(c)).

The Administrator on April 1, 1987 denied petitions for reconsideration of his prior suspension order (October 7 1986) concerning the use of dinoseb on green peas and snap beans and declined to hold a hearing under Subpart D of 40 CFR Part 164. In accordance with Subpart D, 40 CFR Part 164.131(b) the specific exemption applications for use of dinoseb on green peas and snap beans are denied.

II. Emergency Condition

A. Oregon’s Requests

Oregon states that there are a number of broadleaf herbicides registered for use in green peas, snap beans, squash, pumpkins and cucumbers. Oregon has found these pesticides to be unsatisfactory for a number of reasons: Injury has occurred to crops, especially in early season plantings when there are cool, wet conditions; herbicides which require incorporation are difficult to apply and incorporate in western Oregon due to high soil water content in the spring; reduced yields occur due to environmental plus herbicidal effects; most alternatives provide poor control of black nightshade (Solanum nigrum) and hairy nightshade (Solanum sarachoides). Nightshade is difficult to remove from the field by cultivation and hoeing.

According to Oregon, shifts to alternative crops or different cultural practices are impractical, extremely costly and could have profound economic and social effect upon area growers, processors and economies. New mechanical weed control equipment is prohibitively expensive. Hand weeding is not practical because labor is scarce and expensive; timing is critical.

The loss of dinoseb according to Oregon, is a serious concern for the Oregon caneberry industry because of the important role in the production of caneberrys.

(1) Mechanical harvest, which accounts for well over half of the harvested fruit, requires the removal of growth at the plant base (caneburning) for proper operation of the harvester catch plates which “catch” the falling fruit. Dinoseb is used routinely and exclusively for cleaning plant bases before harvest.

(2) The trellis system required for supporting caneberrys makes mechanicacl weed control difficult. If field conditions (e.g., fall rains) prevent growers from applying fall herbicides, major in-row weed problems result by spring. Knock-down with a contact herbicide such as dinoseb is used to control winter weeds unaffected by spring-applied pre-emergence materials.

(3) The alternate-year management system increasingly common in blackberries requires the removal of basal vegetation in the fruiting acreage (normally half). Basal growth is sprayed with dinoseb to prevent competition between fruiting canes and vegetative growth. The economies of this method are achieved by allowing growers to manage the phases (vegetative and fruiting) of the biennial cropping cycle separately.

(4) Red raspberry yield has been increased through the use of dinoseb to retard early season vegetative growth, diverting nutrition to fruit buds. Studies indicated yield increases of 1.2 tons per acre and 1.9 tons per acre with one and two dinitro cane burnings, respectively. Similar yield increases have been reported in blackberries. The inability to basal-burn canes will reduce economic returns by as much as $2.859 per acre.

(5) Virtually all red raspberries and two-thirds of the blackberries in Oregon are chemically pruned at least once annually with dinoseb. The loss of dinoseb could result in a loss of over $13.5 million for Oregon caneberry growers (estimated on 3.500 acres of red raspberries and 4,500 acres of blackberries at an average price of 70 cents per pound reduced by 1.2 tons per acre).

According to Oregon, hand pruning is not a realistic alternative. Crews are not generally available in April and May. Removal of new vegetative canes would cost approximately $100 per acre. The further costs of removing shoots up to 1.5 feet long at the bases of fruiting canes (custom pruning) cannot be accurately estimated.

Oregon claims that there are no acceptable alternatives that are adequately efficacious and economical for weed control in green peas, snap
beans, squash, pumpkins and cucumbers for basal burning of caneberries.

Oregon indicates that resulting losses are estimated to be approximately $3.5 million per year to growers of green peas, $25 million per year to growers of squash, pumpkins, and cucumbers; $13 million per year to growers of caneberries; and $4.5 million a year to growers of snap beans.

**B. Washington's Requests**

Washington states there are several herbicides registered for use on broadleaf weeds in cucumbers: chloramben (Amiben), napralam (Alanes), and DCPA (Dacthal). Bensulide (Prepar) and trifluralin (Treflan) are registered grass herbicides. According to Washington, experience has shown that chloramben and napralam will perform somewhat acceptably if adequate moisture is present; however, adequate moisture is uncommon in non-irrigated western Washington fields in May and June. This may be overcome to some extent by mechanical incorporation one to two inches deep; however, the incorporation is likely to damage the cucumbers, which are planted to fairly shallow depths. In addition, several broadleaf weed species are napralam-resistant. DCPA is registered; however, its performance is not adequate or consistent in western Washington in any field crop.

Washington states the following herbicides are registered for use in snap beans, several of which are for grass control: EPTC (Eptam), trifluralin (Treflan), chlorophopham (IPC), dalapon, fluchloralin (Basalin), and pendimethalin (Prowl). Metolachor (Dual) is primarily useful in controlling grasses with little residual control of broadleaves, possesses potential for crop damage, and is dependent on moisture level for performance, making it unsuitable on non-irrigated fields. Bentazon (Basagran) does not perform acceptably in colder temperatures of Washington spring. DCPA (Dacthal) has been shown to be inconsistent and generally inadequate in performance. Chloramben (Ambien) performance is dependent on moisture, making it unsuitable for non-irrigated fields. Glyphosate (Roundup) and paraquat are contact herbicides with no residual activity.

Washington indicates that the Washington and Oregon raspberry growing areas are contiguous, and their request is intended to be a companion to the Oregon request. Washington states there are no alternative pesticides registered for use to control prumo canes and foliage on raspberries. Paraquat is registered for use in caneberries, but only in the dormant crop.

Washington indicates that without the use of dinoseb cucumber growers could lose 0-60 percent of their yield depending on growing conditions; snap bean growers could lose 35 percent of their yield; and that red raspberry growers could lose 45 percent of their yield (valued at $7.4 million).

**III. Proposed Use**

Oregon requested emergency exemptions for use of dinoseb on green peas, caneberries, squash, pumpkins, and cucumbers between March 1 to June 15, 1987. Washington requested emergency exemptions for use of dinoseb between April 5 and June 15, 1987, for raspberries (April 5 to May 20), snap beans (May 1 to June 15), and cucumbers (May 15 to June 15).

Oregon's proposed specific exemption programs involve use of any formulation of dinoseb or its salts registered prior to the October 1986 suspension for the crops listed. Use would be in accordance with the formerly labeled rates and use directions. A total of 157,100 pounds active ingredient to treat 22,000 acres of snap beans, 8,100 acres of caneberries, and 3,800 acres of cucumbers has been requested. Other conditions of use include: (1) All applications would be performed by certified applicators who have been specifically trained regarding the application of dinoseb and appropriate application methods for dinoseb products; (2) all persons involved in mixing or applying dinoseb would be required to wear hazardous chemical protective clothing, including mask, hood, face protection, and chemical-resistant gloves; (3) closed mixing systems would be required; (4) applications would be made statewide using ground equipment with an enclosed tractor cab or hazardous chemical protective clothing; (5) aerial applications would be made in the area east of the Cascade Mountains only; and (6) hand-held spray applications would be prohibited.

Washington proposes specific exemption programs involve ground application of dinoseb or its salts. A single pre-emergence use at 3 pounds active ingredient per acre in cucumbers for broadleaf weed control; a pre-emergence or early post emergent use at 1.5 pounds active ingredient per acre in snap beans for broadleaf weed control; and two applications at 2.5 pounds active ingredient on raspberries for control of excessive vegetation.

**IV. Notification and Comment**

This notice does not constitute a decision by the Agency on the applications submitted. The Agency's final decision on the specific exemption requested from Washington and Oregon will be based on whether or not there is sufficient new information to open Subpart D hearings and, if so, the outcome of the Subpart D hearings and compliance with the regulations governing section 18.

The regulations governing section 18 require publication of a notice in the Federal Register of receipt of an application that proposes any emergency use of a pesticide if such pesticide was the subject of a previous notice under section 6(c) of FIFRA. The regulations also provide for the opportunity for public comment on the applications (40 CFR 166.24).

Interested persons may submit written views on the applications for emergency exemption to the Program Management and Support Division at the address given above.

The Agency will review and consider all comments received during the comment period.


Edwin F. Tinsworth,
Director, Regulation Division, Office of Pesticide Programs.

[FR 87-9880 Filed 4-15-87; 8:45 am]

BILLING CODE 4310-0Q-M

**Under FEDERAL REGISTER**

**OPP-180732; FRL-3188-9**

**Receipt of Application for Specific Exemption To Use Oxyfluorfen; Solicitation of Public Comment**

**AGENCY:** Environmental Protection Agency (EPA).
SUMMARY: EPA has received a specific exemption request from the Wisconsin Department of Agriculture, Trade and Consumer Protection (hereafter referred to as “Applicant”) for use of the herbicide oxyfluorfen (goal) to control broadleaf weeds in horseradish in Wisconsin. EPA is soliciting comment before making the decision whether or not to grant this specific exemption request.

DATE: Comments must be received on or before May 4, 1987.

ADDRESS: Three copies of written comments, bearing the identification notation “OPP-180732”, should be submitted by mail to: Information Services Section, Program Management and Support Division (TS-757C), Office of Pesticide Programs, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460.

In person, bring comments to: Rm. 236, CM #2, 1921 Jefferson Davis Highway, Arlington, VA.

Information submitted in any comment concerning this notice may be claimed confidential by marking any part or all of that information as “Confidential Business Information.” Information so marked will not be disclosed except in accordance with procedures set forth in 40 CFR Part 2. A copy of the comment that does not contain CBI must be submitted for inclusion in the public record.

Information not marked confidential may be disclosed publicly by EPA without prior notice to the submitter. All written comments will be available for inspection in Rm. 236 at the address given above from 8 a.m. to 4 p.m., Monday through Friday excluding legal holidays.

FOR FURTHER INFORMATION CONTACT: By mail: Stanley J. Austin, Registration Division (TS-757C), Office of Pesticide Programs, Environmental Protection Agency, 401 M St., SW., Washington, DC 20460.

Office location and telephone number: Rm. 716C, CM #2, 1921 Jefferson Davis Highway, Arlington, VA. (703–557–4360).

SUPPLEMENTARY INFORMATION: Pursuant to section 18 of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) (7 U.S.C. 136p), the Administrator may, at his discretion, exempt a State agency from any registration provision of FIFRA if he determines that emergency conditions exist which require such exemption.

The Applicant has requested the Administrator to issue a specific exemption to permit the use of the herbicide oxyfluorfen, available as Goal 1.6E, EPA Reg. No. 707–174, to control broadleaf weeds in horseradish. Information in accordance with 40 CFR Part 166 was submitted as part of this request.

Wisconsin has requested authorization to apply 2.5 pints of Goal 1.6E herbicide (0.5 pounds active ingredient) per acre as a ground spray application on 575 acres of horseradish. Goal 1.6E is a selective herbicide recommended for preemergence control of certain broadleaf weeds. Goal 1.6E will be applied in a minimum of 40 gallons of water per acre.

According to the Applicant, weed control in horseradish fields in Wisconsin is mainly limited to mechanical means. Utilizing mechanical weed control, but without an effective chemical control, the Applicant estimates a 45 to 50% yield loss on eighty acres of horseradish and a 70% yield loss on another 45 acres of horseradish. Total losses in monetary amounts were not given.

Oxyfluorfen was referred to Special Review in January 1980 because pesticide products containing oxyfluorfen as an active ingredient were shown to be contaminated with perchloroethylene (PCE), a liver carcinogen in B6C3F1 mice. The Special Review process was completed on June 23, 1982, and the decision was made to continue registration of the herbicide subject to certain restrictions (on PCE) pertaining to formulation of the product (47 FR 27118).

This notice does not constitute a decision by EPA on the application itself. The regulations governing section 18 require publication of a notice in the Federal Register of receipt of an application for a specific exemption proposing use of a pesticide which contains an active ingredient which has been the subject of a Special Review and is intended for a use that could pose a risk similar to the risk posed by any use of a pesticide which is or has been the subject of a Special Review (40 CFR 186.24(a)(5)).

Accordingly, interested persons may submit written views on this subject to the Program Management and Support Division at the address given above. The Agency will review and consider all comments received during the comment period in determining whether to issue the emergency exemption requested by the Wisconsin Department of Agriculture, Trade and Consumer Protection.


Edwin F. Tisworth, Director, Registration Division, Office of Pesticide Programs.

[FR Doc. 87–6681 Filed 4–10–87; 8:45 am]
BILLING CODE 6550–50–M

[OPPTS–59239A; FRL–3187–3]

Certain Chemicals; Approval of Test Marketing Exemptions

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: This notice announces EPA’s approval of three applications for test marketing exemptions (TMEs) under section 5(h)(6) of the Toxic Substances Control Act (TSCA), TME–87–8, 87–9, and 87–10. The test marketing conditions are described below.


SUPPLEMENTARY INFORMATION: Section 5(h)(1) of TSCA authorizes EPA to exempt persons from premanufacture notification (PMN) requirements and permit them to manufacture or import new chemical substances for test marketing purposes if the Agency finds that the manufacture, processing, distribution in commerce, use, and disposal of the substances for test marketing purposes will not present any unreasonable risk of injury to health or the environment. EPA may impose restrictions on test marketing activities and may modify or revoke a test marketing exemption upon receipt of new information which casts significant doubt on its finding that the test marketing activity will not present any unreasonable risk of injury.

EPA hereby approves TME–87–8, 87–9, and 87–10. EPA has determined that test marketing of the new chemical substances described below, under the conditions set out in the TME applications, and for the time period and restrictions specified below, will not present any unreasonable risk of injury to health or the environment. Production volumes, uses, and the number of customers must not exceed those specified in the applications. All other conditions and restrictions described in the applications and in this notice must be met.
The following additional restrictions apply to TME 87-8, 87-9, and 87-10. A bill of lading accompanying each shipment must state that the use of each substance is restricted to that approved in the TME. In addition, the Company shall maintain the following records for inspection or copying in accordance with section 11 of TSCA:

1. The applicant must maintain records of the quantities of the TME substances produced.
2. The applicant must maintain records of dates of the shipments to the customer and the quantities supplied in each shipment.
3. The applicant must maintain copies of the bill of lading that accompanies each shipment of the TME substances.
4. The applicant and its customer must maintain the following information on disposal of T-87-10: Dates waste materials are disposed of, location of disposal site, volume of any disposal material, and the estimated volume of any liquid waste containing the TME substances.

T-87-8

Date of Receipt: February 9, 1987
Notice of Receipt: February 27, 1987

Applicant: Confidential.
Use: Gasoline additive.
Production Volume: Confidential.
Number of Customers: 1.

Worker Exposure: Imported. During processing at one site, 2-3 workers will be exposed dermally up to 8 hours/day. Dermal exposure is negligible if protective gloves are worn. Use: no significant exposures.

Test Marketing Period: Twelve Months.

Commencing On: (March 24, 1987)

Risk Assessment: EPA identified no significant health or environmental concerns. Therefore, the test market substance will not present any unreasonable risk of injury to health or the environment.

Public Comments: None.

T-87-9

Date of Receipt: February 9, 1987
Notice of Receipt: February 27, 1987

Applicant: Confidential.
Use: Gasoline additive.
Production Volume: Confidential.
Number of Customers: 1.

Worker Exposure: Imported. During processing at one site, 2-3 workers will be exposed dermally up to 8 hours/day. Dermal exposure is negligible if protective gloves are worn. Use: no significant exposures.

Test Marketing Period: Twelve Months.

Commencing On: (March 24, 1987)

Risk Assessment: EPA identified no significant health concerns. EPA identified potential adverse environmental effects associated with exposure to the TME substance. However, EPA has determined that, under the conditions outlined above, and the restrictions outlined below, there will be no significant releases of the test market substances to the environment. Therefore, the test marketing activities will not present any unreasonable risk to the environment.

Additional Restrictions: The applicant and its one customer shall dispose of all wastes containing the TME substance T-87-10 by incineration in compliance with all applicable federal, state, and local laws and regulations.

Public comments: None.

The Agency reserves the right to rescind approval or modify the conditions and restrictions of any exemptions should any new information come to its attention which casts significant doubt on its finding that the test marketing activities will not present any unreasonable risk of injury to health or the environment.

Dated: March 24, 1987
Charles L. Elkins,
Director, Office of Toxic Substances.
[FR Doc. 87-8422 Filed 4-16-87; 8:45 am]
BILLING CODE 6560-50-M

[OPTS-51670; FRL-3186-3]
Certain Chemicals Premanufacture

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: Section 5(a)(1) of the Toxic Substances Control Act (TSCA) requires any person who intends to manufacture or import a new chemical substance to submit a premanufacture notice (PMN) to EPA at least 90 days before manufacture or import commences. Statutory requirements for section 5(a)(1) premanufacture notices are discussed in the final rule published in the Federal Register of May 13, 1983 (FR 21722). This notice announces receipt of thirty-five such PMNs and provides a summary of each.

DATE: Close of Review Period:
P 87-886, 87-887, 87-888, 87-889, 87-890, 87-891, 87-892 and 87-893, June 24, 1987
P 87-894, 87-895, 87-896 and 87-897
June 27, 1987
P 87-914, 87-915, 87-916 and 87-917
June 29, 1987
P 87-918, 87-919 and 87-920, July 1, 1987
Written comments by:
P 87-886, 87-887, 87-888, 87-889, 87-890, 87-891, 87-892 and 87-893, May 25, 1987
P 87-894, 87-895, 87-896 and 87-897
May 28, 1987
P 87-914, 87-915, 87-916, 87-917, 87-918, 87-919 and 87-920, May 30, 1987

ADDRESS: Written comments, identified by the document control number ["OPTS-51670"] and the specific PMN number should be sent to: Document Processing Center (TS-790), Office of Toxic Substances, Environmental Protection Agency, Rm. L-100, 401 M Street, SW., Washington, DC 20460, (202) 554-1305.

FOR FURTHER INFORMATION CONTACT:
Stephanie Roan, Premanufacture Notice Management Branch, Chemical Control Division (TS-794), Office of Toxic Substances, Environmental Protection
modifier for latex adhesive production. 
Prod. range, Confidential.

P 87-907
Manufacturer. Occidental Chemical Corporation. 
Chemical. (G) Polyether aromatic urethane. 
Use/Production. (G) Polyurethane intermediate. 
Prod. range, Confidential.

P 87-908
Manufacturer. Occidental Chemical Corporation. 
Chemical. (P) Propoxylated glycerol; chloroacetic acid; and sodium thiosulfate. 
Use/Import. (G) Organic salt of sulfonic acid, alpha allyl ethyl ester. 
Use/Production. (G) Catalyst for manufacture of esters. Prod. range, 25,000 to 50,000 kg/yr.

P 87-909
Importer. de LAIRE. 
Chemical. (S) 2-Cyclopentene-1-acetic acid and ethyl ester. 
Use/Import. (S) A raw material of fragrance compound. Import range, Confidential.

P 87-910
Importer. de LAIRE. 
Chemical. (S) 2-Cyclopentene-1-acetic acid, alpha allyl ethyl ester. 
Use/Import. (S) A raw material of fragrance compound. Import range, 190 kg/yr.

P 87-911
Importer. de LAIRE. 
Chemical. (S) 2-Cyclopentene-1-acetic acid; 1-methyloxyethyl ester. 
Use/Import. (S) A raw material of fragrance compound. Import range, 80 kg/yr.

P 87-912
Manufacturer. Gould-Randco. 
Chemical. (G) Dialkoxy titanium diaklanolamine chelate. 
Use/Production. (G) Catalyst for manufacture of esters. Prod. range, 25,000 to 50,000 kg/yr.

P 87-913
Manufacturer. Gould-Randco. 
Chemical. (G) Titanium (dialkoxyamine) oxide. 
Use/Production. (G) Catalyst for manufacture of esters. Prod. range, 25,000 to 50,000 kg/yr.

P 87-914
Manufacturer. Confidential. 
Chemical. (G) Modified epoxy resin. 
Use/Production. (G) Site limited and industrial component of metal coating formulation. Prod. range, 50,000 to 100,000 kg/yr. Non-mutagenic.

P 87-915
Manufacturer. Confidential.

Chemical. (G) Carbonochloridothiatic acid, aryI ester. 
Use/Production. (G) Destructive use intermediate. Prod. range, Confidential. 
Toxicity Data. Acute oral, 3,433 mg/kg; Acute dermal, > 2,000 mg/kg; Irritation, Skin—Moderate, Eye—Moderate.

P 87-916
Importer. Confidential. 
Chemical. (G) Isocyanate capped epoxy resin. 
Use/Import. (G) Resin for paints and sealants. Import range, Confidential.

P 87-917
Manufacturer. Confidential. 
Chemical. (G) Vinyl acrylic copolymer. 
Use/Production. (G) Coatings additive in an open non-dispersive use. Prod. range, Confidential.

P 87-918
Manufacturer. Confidential. 
Chemical. (G) Polyester urethane of neopentyl glycol. 
Use/Production. (G) Industrial coating with an open use. Prod. range, 27,500 to 110,000 kg/yr.

P 87-919
Manufacturer. Confidential. 
Chemical. (G) Styrenated acrylate polymer with methyl methacrylate. 
Use/Production. (G) Paint vehicle resin. Prod. range, 975,000 to 1,000,000 kg/yr.

P 87-920
Manufacturer. Ruetgers-Nease Chemical Company, Inc. 
Chemical. (G) Organic salt of sulfonic acid. 
Use/Production. (S) Industrial additive in cement; cleaning agent. Prod. range, Confidential. 
Denise Devoe, 
Acting Division Director, Information Management Division. 
[FR Doc. 87-3841 Filed 4-16-87; 8:45 am] 
BILLING CODE 6560-50-M

[OW-3-FRL-3188-8]

Ground Water System of a Limestone Aquifer (of the Valley and Ridge Province) of the Appalachian Valley Region in the Boyce-Millwood Area, Clarke County, VA

AGENCY: Environmental Protection Agency.

ACTION: Notice.

SUMMARY: The Administrator of the U.S. Environmental Protection Agency has determined that the ground water system of the Stonehenge and Conococheague Limestone formation of the Appalachian Valley Region, which underlies part of Clarke County, Virginia and around the towns of Boyce and Millwood (denominated the "Prospect Hill Spring Aquifer"), is the sole source or principal source of drinking water for that part of Clarke County, and that such aquifer, if contaminated, would create a significant hazard to public health. This determination is in response to a petition submitted by the Clarke County Board of Supervisors requesting that the Administrator of EPA make a determination pursuant to section 1424(e) of the Safe Drinking Water Act, 42 U.S.C. 300h-3(e), as amended, that the Prospect Hill Spring Aquifer is a sole or principal source of drinking water for the area. As a result of this action, Federal financially assisted projects in the designated area will be subject to EPA review pursuant to section 1424(e) to ensure that these projects are designed and constructed so that they do not contaminate this aquifer so as to create a significant hazard to public health.

EFFECTIVE DATE: This determination shall be promulgated for purposes of judicial review at 1:00 p.m. eastern standard time on May 1, 1987. This determination shall become effective on June 1, 1987.

ADDRESS: The data on which these findings are based are available to the public and may be inspected during normal business hours at the U.S. Environmental Protection Agency, Region III, Drinking Water/Ground Water Protection Branch, 841 Chestnut Building, Philadelphia, Pennsylvania 19107.

FOR FURTHER INFORMATION CONTACT: Jon Capacasa, Chief, Drinking Water/Ground Water Protection Branch, Environmental Protection Agency, Region III at the above address or at (215) 587-8227.

SUPPLEMENTARY INFORMATION: Notice is hereby given that pursuant to section 1424(e) of the Safe Drinking Water Act, 42 U.S.C. 300h-3(e), the Administrator of the Environmental Protection Agency has determined that the ground water system of the Stonehenge and Conococheague Limestone formations is the sole or principal source of drinking water for the areas in and around the towns of Boyce and Millwood. This aquifer supplies drinking water to public water systems and individual (single family) wells. Pursuant to section 1424(e), Federal financially assisted projects, constructed on the
denominated “Prospect Hill Spring Aquifer” or within its streamflow source zone, will be subject to EPA review.

1. Background—Section 1424(e) of the Safe Drinking Water Act provides:

If the Administrator determines, on his own initiative or upon petition, that an area has an aquifer which is the sole or principal drinking water source for the area which, if contaminated, would create a significant hazard to public health, he shall publish notice that determination in the Federal Register. After the publication of such notice, no commitment for Federal financial assistance (through a grant, contract, loan guarantee, or otherwise) may be entered into for any project which the Administrator determines may contaminate such aquifer through a recharge zone so as to create a significant hazard to public health but a commitment for Federal financial assistance may, if authorized under another provision of law, be entered into to plan or design the project to assure that it will not so contaminate the aquifer.

On June 27, 1985, the Board of Supervisors of Clarke County, Virginia, petitioned the Administrator of EPA, pursuant to section 1424(e) of the Safe Drinking Water Act, to designate portions of the Stonehenge and Conococheague Limestone formations in Clarke County, Virginia, denominated “Prospect Hill Spring Aquifer” as the sole or principal source of drinking water for an area, which, if contaminated, would create a significant hazard to public health. A notice of receipt of this petition, together with a request for comments, was published in the Federal Register on October 31, 1985 (50 FR 45498).

The single public comment received recommended the designation. Because there were no requests for a public hearing and the one public comment received was favorable, a public hearing was deemed unnecessary. Upon review of the petition, EPA has determined that the streamflow source zone of the designated aquifer is a portion of the drainage basin of Page Brook. The streamflow source zone is approximately twelve (12) square miles. An enlarged map of the area and all the information utilized in this determination, which includes the petition, written comments, and various technical publications, are available to the public and may be inspected during normal business hours at the office of the Environmental Protection Agency, Region III, 641 Chestnut Blvd., Philadelphia, Pennsylvania 19107.

On June 8, 1979, an Order was issued by the Federal Register, (FR 12199) from the Pennsylvania Department of Health, designating the area as the “Prospect Hill Spring” aquifer. Since then the area has been under the jurisdiction of the local Health Department.

The proposed regulations contain procedures for review of Federal financially assisted projects which could contaminate “sole or principal source” aquifers through the recharge zone so as to create a significant hazard to public health. Regulations for implementing section 1424(e) of the Safe Drinking Water Act (42 FR 51820) are promulgated. EPA Region III is already working with the Federal agencies which may in the future sponsor projects in the area of concern in order to develop interagency procedures whereby EPA will be notified of proposed commitments for projects which could contaminate the designated aquifer. EPA will evaluate such projects, and, where necessary, conduct an in-depth review, including soliciting public comments where appropriate.

Although the project review process cannot be delegated, the Regional Administrator in Region III will rely to the maximum extent possible upon any existing or future State and local control mechanisms in protecting the ground water quality of the aquifer underlying the designated area. Included in the review of any Federal financially assisted project will be coordination with the State and local agencies. Their comments will be given full consideration and the Federal review process will function so as to...
complement and support State and local mechanisms.

Economic and Regulatory Impact

Pursuant to the provisions of the Regulatory Flexibility Act (RFA), 5 U.S.C. 605(b), I hereby certify that the attached rule will not have a significant impact on a substantial number of small entities. For purposes of this certification the term “small entity” shall have the same meaning given in the RFA, 5 U.S.C. 601(6). This action is only applicable to the area covered by the petition, and affects only requests for Federal financial assistance for projects which have the potential for contaminating the aquifer so as to create a significant hazard to public health.

While the number of small entities which submit such requests cannot be predicted, EPA has stated that it “will not be concerned with reviewing, on an individual basis, small isolated commitments of financial assistance” 42 FR 51621 (September 29, 1977). Thus the number of projects reviewed in this area should be very small; protection of the aquifer will normally require review of larger, potentially contaminating or overpumping projects such as housing projects, highways or sewage treatment plants which would not ordinarily be small entities under the RFA. See, 42 FR 51621, 51622.

For those small entities which are subject to review, the impact of today’s action will not be significant. As noted in the Federal Register preamble cited above, most projects subject to this review will be preceded by a ground water impact assessment under other Federal laws, such as the National Environmental Policy Act (NEPA). Integration of those related review procedures with Sole Source Aquifer review will allow EPA and other Federal agencies to avoid delay or duplication of effort in approving a grant of assistance, thus minimizing any adverse effect on those small entities which are affected.

Finally, today’s action does not prevent grants of Federal financial assistance which may be available to any small entity in order to pay for the redesign of a project to assure protection of the aquifer.

Pursuant to Executive Order 12291, EPA must determine whether a regulation is “major” and therefore subject to the requirement of a Regulatory Impact Analysis. This regulation is not major because it will not have an annual effect of $100 million or more on the economy, nor will it cause any major increases in competition, employment, investment, or productivity, in domestic or export markets. Today’s action only affects the “Prospect Hill Sprng” aquifer and the surrounding area. It provides an additional review of ground water protection measures, including any instituted by local authorities, for only those projects which request Federal financial assistance in this area. This rule was submitted to the Office of Management and Budget in accordance with the requirements of Executive Order 12291.


James M. Seif,
Regional Administrator.
[FR Doc. 87-8682 Filed 4-16-87; 8:45 am]
BILLING CODE 6560-50-M

FEDERAL EMERGENCY MANAGEMENT AGENCY

Agency Information Collection Submitted to the Office of Management and Budget for Clearance

The Federal Emergency Management Agency (FEMA) has submitted to the Office of Management and Budget the following information collection package for clearance in accordance with the Paperwork Reduction Act (44 U.S.C. chapter 35).

Type: Extension of 3067-0026.

Title: Application for Loan Cancellation.

Abstract: The form was developed for use by local governments in conjunction with the Community Disaster Loan Program (section 614, Pub. L. 93–288). The form was utilized to request cancellation of a Community Disaster Loan in accordance with the provisions of the law and regulation pertaining to Community Disaster Loans.

Type of respondents: State or local governments.

Number of Respondents: 5.

Burden Hours: 30.

Frequency of Recordkeeping or Reporting: On occasion.

Copies of the above information collection request and supporting documentation can be obtained by calling or writing the FEMA Clearance Officer, Linda Shiley, (202) 646-2824, 500 C. Street NW., Washington, DC 20472.

Comments should be directed to Francine Picoult, (202) 395–7231, Office of Management and Budget, 3225 NEOB, Washington, DC 20503 within two weeks of this notice.

Wesley C. Moore,
Director, Office of Administrative Support.
[FR Doc. 87–8689 Filed 4–16–87; 8:45 am]
BILLING CODE 6718–01–M

FEDERAL RESERVE SYSTEM

Fidelcor, Inc., Acquisition of Company Engaged in Permissible Nonbanking Activities

The organization listed in this notice has applied under § 225.23(a)(2) or (f) of the Board’s Regulation Y (12 CFR 225.23(a)(2) or (f)) for the Board’s approval under section 4(c)(6) of the Bank Holding Company Act (12 U.S.C. 1843(c)(6)) and § 225.21(a) of Regulation Y (12 CFR 225.21(a)) to acquire or control voting securities or assets of a company engaged in a nonbanking activity that is listed in § 225.25 of Regulation Y as closely related to banking and permissible for bank holding companies. Unless otherwise noted, such activities will be conducted throughout the United States.

The application is available for immediate inspection at the Federal Reserve Bank indicated. Once the application has been accepted for processing, it will also be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing on the
question whether consumption of the proposal can "reasonable be expected to produce benefits to the public, such as greater convenience, increased competition, or gains in efficiency, that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices." Any request for a hearing on this question must be accompanied by a statement of the reasons a written presentation would not suffice in lieu of a hearing, identifying specifically any questions of fact that are in dispute, summarizing the evidence that would be presented at a hearing, and indicating how the party commenting would be aggrieved by approval of the proposal.

Comments regarding the application must be received at the Reserve Bank indicated or the offices of the Board of Governors not later than May 11, 1987

A. Federal Reserve Bank of Philadelphia (Thomas K. Desch, Vice President) 100 North 6th Street, Philadelphia, Pennsylvania 19105:

1. Fidelcor, Inc., Philadelphia, Pennsylvania; to acquire Lazere Financial Corporation, New York, New York, and thereby engage in servicing loans or other extensions of credit for the account of others pursuant to § 225.25(b)(1) and providing to others data processing services pursuant to § 225.25(b)(7) of the Board's Regulation Y.


James McAfee, Associate Secretary of the Board.

[FR Doc. 87–8645 Filed 4–16–87; 8:45 am]
BILLING CODE 6210–01–M

Hamptons Bancshares, Inc., et al., Applications To Engage de novo in Permissible Nonbanking Activities

The companies listed in this notice have filed an application under § 225.23(a)(1) of the Board's Regulation Y (12 CFR 225.23(a)(1)) for the Board's approval under section 4(c)(8) of the Bank Holding Company Act (12 U.S.C. 1842(c)) of the Board of Governors, to engage de novo in an activity that is closely related to the business of a bank. Each application is available for immediate inspection at the Federal Reserve Bank indicated. Once the application has been accepted for processing, it will also be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing on the question whether consummation of the proposal can "reasonably be expected to produce benefits to the public, such as greater convenience, increased competition, or gains in efficiency, that outweigh possible adverse effects, such as undue concentration of resources, decreased or unfair competition, conflicts of interests, or unsound banking practices." Any request for a hearing on this question must be accompanied by a statement of the reasons a written presentation would not suffice in lieu of a hearing, identifying specifically any questions of fact that are in dispute, summarizing the evidence that would be presented at a hearing, and indicating how the party commenting would be aggrieved by approval of the proposal.

Comments regarding the application must be received at the Reserve Bank indicated or the offices of the Board of Governors not later than May 11, 1987.

B. Federal Reserve Bank of Atlanta (Robert E. Heck, Vice President) 104 Marietta Street, NW., Atlanta, Georgia 30303:

1. First Bank Financial Corp., Conyers, Georgia: to engage de novo in the origination and servicing of first mortgage real estate loans for the secondary market, pursuant to § 225.25(b)(1) of the Board's Regulation Y. These activities will be conducted in the State of Georgia.


James McAfee, Associate Secretary of the Board.

[FR Doc. 87–8647 Filed 4–16–87; 8:45 am]
BILLING CODE 6210–01–M

LaCinda Johnson Scroggie; Acquisition of Shares of Banks or Bank Holding Companies

The notificant listed below has applied under the Change in Bank Control Act (12 U.S.C. 1817(jj)) and § 225.41 of the Board's Regulation Y (12 CFR 225.41) to acquire a bank or bank holding company. The factors that are considered in acting on notices are set forth in paragraph 7 of the Act (12 U.S.C. 1817(jj)(7)).

The notices are available for immediate inspection at the Federal Reserve Bank indicated. Once the notices have been accepted for processing, they will also be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing to the Reserve Bank indicated for that notice or to the offices of the Board of Governors. Comments must be received not later than May 1, 1987.

A. Federal Reserve Bank of San Francisco (Harry W. Green, Vice President) 101 Market Street, San Francisco, California 94105:

1. LaCinda Johnson Scroggie, Santa Ynez, California; to retain 15.9 percent of the voting shares of Community Bank of Santa Ynez Valley, Solvang, California.


James McAfee, Associate Secretary of the Board.

[FR Doc. 87–8644 Filed 4–10–87; 8:45 am]
BILLING CODE 6210–01–M

Sharon, Bancshares, Inc., et al., Formations of, Acquisitions by and Mergers of Bank Holding Companies

The companies listed in this notice have applied for the Board's approval under section 3 of the Bank Holding Company Act (12 U.S.C. 1842) and § 225.14 of the Board's Regulation Y (12 CFR 225.14) to become a bank holding company or to acquire a bank or bank holding company. The factors that are considered in acting on the applications are set forth in section 3(c) of the Act (12 U.S.C. 1842(c)).

Each application is available for immediate inspection at the Federal Reserve Bank indicated. Once the applications have been accepted for processing, it will also be available for inspection at the offices of the Board of Governors. Interested persons may express their views in writing to the Reserve Bank or to the offices of the Board of Governors. Any comment on an application that requests a hearing
must include a statement of why a written presentation would not suffice in lieu of a hearing, identifying specifically any questions of fact that are in dispute and summarizing the evidence that would be presented at the hearing.

Unless otherwise noted, comments regarding each of these applications must be received not later than May 8, 1987.

A. Federal Reserve: Bank of St. Louis

<table>
<thead>
<tr>
<th>Address</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>411 Locust Street, St. Louis, Missouri 63101</td>
<td>Randall C. Sumner, Vice President</td>
</tr>
</tbody>
</table>

B. Federal Reserve Bank of Minneapolis

<table>
<thead>
<tr>
<th>Address</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>250 Marquette Avenue, Minneapolis, Minnesota 55401</td>
<td>James M. Lyon, Vice President</td>
</tr>
</tbody>
</table>

Board of Governors of the Federal Reserve System. April 13, 1987

James McAbee, Associate Secretary of the Board

[FR Doc. 87-6846 Filed 4-18-87 8:45 am]

BILLING CODE 4160-01-M

DEPARTMENT OF HEALTH AND HUMAN SERVICES

Centers for Disease Control

Fatal Accident Circumstances and Epidemiology (FACE) Symposium; Open Meeting.

The following symposium will be convened by the National Institute for Occupational Safety and Health (NIOSH) of the Centers for Disease Control (CDC) and will be open to the public for observation and participation, limited only by the space available.

Fatal Accident Circumstances and Epidemiology (FACE).

Date: May 21-22, 1987.

Time: 8 a.m.-5 p.m. May 21, 1987; 7:30 a.m.-5 p.m. May 22, 1987.

Place: Room C-120, National Institute of Health, Safety and Health Academy, Portand Road, Bethesda, Maryland 20852.

Purpose: The purpose of this symposium is to review and discuss the results obtained in the FACE program to date and to elicit input concerning future direction and expansion of the program.

Additional information may be obtained from Jan C Manwaring, Division of Safety Research, NIOSH.

CDC, 944 Chestnut Ridge Road, Morgantown, West Virginia 26505; Telephone: FTS 929-4811; Commercial: 304-291-4811.


Robert L. Foster, Assistant Director, Office of Program Support Centers for Disease Control.

[FR Doc. 87-6828 Filed 4-18-87 8:45 am]

BILLING CODE 4160-19-M

Food and Drug Administration

Dow Chemical U.S.A., Withdrawal of Approval of NADA's

AGENCY: Food and Drug Administration.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is withdrawing approval of three new animal drug applications (NADA's) held by Dow Chemical U.S.A. The NADA's provide for use of ronnel Type A articles for making Type B cattle feeds. The firm requested withdrawal of approval.


FOR FURTHER INFORMATION CONTACT: Mohammed I. Sharar, Center for Veterinary Medicine (HFP-214), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857 301-443-3164.

SUPPLEMENTARY INFORMATION: Dow Chemical U.S.A., P.O. Box 1706, Midland, Michigan 48640, is the sponsor of NADA 11-076; Trolene FR Insecticidal Premix, NADA 41-377; Trolene 18 Insecticidal Salt Premix, and NADA 48-950; Trolene 20 L Insecticidal Liquid Premix. The NADA's provide for use of these ronnel Type A articles for making Type B cattle feeds. The firm requested withdrawal of approval.

By letter of December 3, 1986, the sponsor requested the withdrawal of approval because the products were not being manufactured or marketed.

Therefore, under the Federal Food, Drug, and Cosmetic Act (sec. 512(e), 21 U.S.C. 360b(e)) and under authority delegated to the Commissioner of Food and Drugs (21 CFR 5.10) and redelegated to the Center for Veterinary Medicine (21 CFR 5.84) and in accordance with 5 CFR 514.115 Withdrawal of approval of applications, notice is given that approval of NADA's 11-076, 41-377, and 48-950 and all supplements thereto are hereby withdrawn, effective April 27, 1987.

In a final rule published elsewhere in this issue of the Federal Register, FDA is removing 21 CFR 558.525(a)(1) and 558.528 that reflect these approvals.


Gerald B. Guest, Director, Center for Veterinary Medicine.

[FR Doc. 87-6837 Filed 4-18-87 8:45 am]

BILLING CODE 4160-01-M

[Docket No. 87N-0132] Workshop on Epidemiology of Haemophilus Influenza Type B Disease; Public Meeting:

AGENCY: Food and Drug Administration.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is announcing a public workshop to discuss the epidemiology of Haemophilus Influenza Type B disease.

DATE: The workshop will be held on Monday, April 20, 1987 from 8 a.m. to 5 p.m.

ADDRESS: The workshop will be held at the National Institutes of Health, Conference Room B, Building 31C, Room 1001, Rockville Pike, Bethesda, MD 20892, 301-496-1920.

FOR FURTHER INFORMATION CONTACT: Carl Frasch, Center for Drugs and Biologics (HFS-858), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857 301-443-6410.

SUPPLEMENTARY INFORMATION: On April 20, 1987 FDA will sponsor a workshop on the epidemiology of Haemophilus Influenza Type B disease since the introduction of Haemophilus B Polysaccharide Vaccine in April 1985. There are currently three licensed manufacturers of this vaccine. FDA will use the information provided during this workshop to develop plans for further scientific and regulatory activities.

Persons planning to attend should be aware that space is limited and should contact either Carl Frasch or Joel Kuritsky (addresses above) to obtain additional information.


John M. Taylor, Associate Commissioner for Regulatory Affairs.

[FR Doc. 87-6734 Filed 4-6-87 10:38 am]

BILLING CODE 4160-01-M
[Docket No. 87P-0118]

Petition Requesting Recision of 3 Years' Exclusivity for Persantine Brand of Dipyridamole

AGENCY: Food and Drug Administration.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is announcing the filing of a petition requesting that the agency rescind its decision to grant 3 years' marketing exclusivity for Persantine brand of dipyridamole for its use "as an adjunct to coumann anticoagulants in the prevention of postoperative thromboembolic complications of cardiac valve replacement." FDA is giving notice of the filing of this petition to all interested persons because, should FDA decide to grant the petition, this decision would affect the date when approval for an application described in section 505(b)(2) of the act, the effective dates of which might be changed by a decision to grant the petition, persons who have such applications pending or who contemplate submitting such applications, and persons whose right to submit such applications may be affected.

DATE: Comments by May 18, 1987.

ADDRESS: Requests for a copy of the petition and written comments regarding the petition to Dockets Management Branch (HFA-305), Rm. 4-62, Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857

FOR FURTHER INFORMATION CONTACT: Judy O'Neal, Center for Drugs and Biologics (HPN-396), Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857 301-295-8041.

SUPPLEMENTARY INFORMATION: On September 24, 1984, the President signed into law the Drug Price Competition and Patent Term Restoration Act of 1984. The new legislation amends the Federal Food, Drug, and Cosmetic Act (the act) (21 U.S.C. 355(c)(3)(D)(iv) and (j)(4)(D)(iv)) by making new drugs that have been previously approved for safety and effectiveness available 3 years earlier than the original patent expiration date. The new legislation also provides for periods of "exclusive" marketing for, among other things, certain changes in new drug products approved in a supplement to an application under section 505(b) of the act. Approval of an ANDA or new drug application described in section 505(b)(2) of the act, submitted for such a change, may not be made effective until the period of "exclusive" marketing ends.

The new drug products that have been granted "exclusivity" under one of the several exclusivity provisions of this new legislation are set forth in the publication entitled "Approved Drug Products with Therapeutic Equivalence Evaluations" (the list) and its monthly supplements. In addition, the period of exclusivity is shown in the list. Persantine's 3-year exclusivity appears in the seventh edition of the list.

Interested persons may disagree with the agency's findings. Accordingly, FDA has established a policy that, whenever an interested person submits a citizen petition requesting a change in the exclusivity status of an approved product, the agency will publish a notice in the Federal Register of the availability of the petition. This publication is constructive notice to all interested persons that they may be affected by the petition and gives them an opportunity to submit their comments on the petition to the agency. Persons potentially affected include holders of approved ANDA's or approved new drug applications described in section 505(b)(2) of the act, the effective dates of which might be changed by a decision to grant the petition, persons who have such applications pending or who contemplate submitting such applications, and persons whose right to submit such applications may be affected.

Although the agency has made a determination that Persantine is entitled to 3 years' exclusivity under section 505(c)(3)(D)(iv) and (j)(4)(D)(iv) of the Federal Food, Drug, and Cosmetic Act (the act), FDA is announcing, in accord with the policy above, a filing of a petition (87P-0118) submitted on behalf of the National Association of Pharmaceutical Manufacturers, et al., requesting that this exclusivity be rescinded. Petitioners state that an award of exclusivity under section 505(c)(3)(D)(iv) and (j)(4)(D)(iv) of the act is unlawful. Petitioners state that for the reasons given in their petition the pertinent statutory provisions, section 505(c)(3)(D)(iv) and (j)(4)(D)(iv) of the act, were not intended to provide market exclusivity to products being reviewed under the agency's Drug Efficacy Study program but rather only to products already approved for safety and effectiveness.

FDA is reviewing the merits of this petition and, by this notice, is giving anyone who may be affected by this petition an opportunity to submit comments.

Interested persons may, on or before May 4, 1987, submit to the Dockets Management Branch (address above) written comments on the petition. These comments will be considered in preparing an agency response to the petition. Two copies of any comments are to be submitted, except that individuals may submit one copy. Comments are to be identified with the docket number found in brackets in the heading of this document. The petition and received comments may be seen in the Dockets Management Branch between 9 a.m. and 4 p.m., Monday through Friday. Requests for a single copy of the petition should be sent to the Dockets Management Branch.


John M. Taylor,
Associate Commissioner for Regulatory Affairs

[FR Doc. 87-8397 Filed 4-16-87; 8:43 am]
BILLING CODE 4160-01-M

[Docket Nos. 87D-0110 and 87D-0111]

Medical Devices; Compliance Policy Guide Regarding Defect Action Levels for Condoms—Guideline on Labeling of Condoms; Availability

AGENCY: Food and Drug Administration.

ACTION: Notice.

SUMMARY: The Food and Drug Administration (FDA) is announcing the availability of two documents: a compliance policy guide (CPG) entitled "Condoms: Defects—Criteria for Direct Reference Seizure to General Counsel April 10, 1987" and a guideline on the labeling of condoms. The two documents were prepared by FDA's Center for Devices and Radiological Health (CDRH). FDA is taking these actions under the Federal Food, Drug, and Cosmetic Act (the act).

DATE: Written comments submitted by June 18, 1987, will be considered by FDA in determining whether immediate revisions of the CPG or guideline are warranted; however, comments may be submitted on the two documents at any time for FDA's consideration.

ADDRESS: Written requests for a single copy of the CPG or the guideline to the Dockets Management Branch (HFA-305), Rm. 4-62, Food and Drug Administration, 5600 Fishers Lane, Rockville, MD 20857. Submit any written comments on the CPG (referencing Docket No. 87D-0110) or the guideline (referencing Docket No. 87D-0111) to the same address. The CPG and the guideline and any comments received on them may be seen in the office above between 9 a.m. and 4 p.m., Monday through Friday. (Send two self-addressed adhesive labels to assist the Branch in processing your request.)

FOR FURTHER INFORMATION CONTACT: Frank J. Piparr, Center for Devices and Radiological Health (HFZ-323), Food and Drug Administration, 8757 Georgia Ave., Silver Spring, MD 20910, 301-427-8162.
SUPPLEMENTARY INFORMATION: FDA, primarily through CDRH, regulates medical devices in commercial distribution under the Medical Device Amendments of 1976 (the amendments), (Pub. L. 94-295), to the Act. One provision of the amendments, section 513 of the Act (21 U.S.C. 360c), establishes three categories (classes) of devices, depending upon the regulatory controls needed to provide reasonable assurance of their safety and effectiveness: Class I (general controls), Class II (performance standards), and Class III (premarket approval). Following procedures in the statute, FDA has classified the condom as a Class II device. See 21 CFR 884.5300. The device is made of latex or natural membranes.

In view of the increasing use of condoms as a protection against acquired immunodeficiency syndrome (AIDS) and other sexually transmitted diseases, CDRH has revised its strategy for the regulation of condoms: CDRH's strategy consists of (1) strengthening its inspection of manufacturers and repackagers of condoms to ensure conformance with FDA's current good manufacturing practice (CGMP) regulations at 21 CFR Part 820; (2) strengthening its sampling/inspection of condoms in commercial distribution to reduce to the extent possible the number of condoms with leakage defects, and (3) providing guidance on labeling of condoms intended for use only with the rejection criteria in the voluntary standard used by domestic manufacturers of latex condoms. The manufacturers are using the American Society for Testing Materials' (ASTM) Standard Specification for Rubber Contraceptives (Condoms)—Designation: D3482-83 for quality control of leakage defects in condoms (Ref. 3). According to this voluntary standard, the acceptable quality level for leakage is 0.4 percent; i.e., not to exceed 4 leaking condoms per 1,000 condoms examined. For example, FDA will reject a lot of condoms if 5 or more condoms are found with leakage defects per 1,000 condoms examined.

The CPG states that FDA will follow a statistically based sampling/inspection plan. FDA's sampling/inspection plan was taken from MIL-STD-103D (the military standard for "Sampling Procedures and Tables for Inspection by Attributes") based on an acceptable quality level of 0.4 percent. A lot of condoms found to meet or exceed the rejection criteria for leakage defects (i.e., 5 or more leaking condoms per 1,000) would be subject to a recommendation for direct reference seizure action to FDA's Office of General Counsel.

Guideline on Labeling of Condoms

To implement the third element in FDA's strategy for regulating condoms, CDRH has developed and is issuing guidance on labeling of those devices. The guidance on labeling consists of a letter that FDA is sending to all manufacturers, importers, and repackagers of condoms. The letter will assist these firms to prepare labeling that provides adequate directions for use of condoms intended for prevention of sexually transmitted diseases.

Accordingly, under Docket No. 87D-0111, FDA is making available a revised CPG and a guideline on labeling.

Interested persons may at any time submit to the Dockets Management Branch (address above) written comments on the CPG or the guideline; however, comments submitted by June 16, 1987 will be considered by FDA in determining whether immediate revisions of the CPG or guideline are warranted. Identify comments on the CPG with Docket No. 87D-0110. Identify comments on the guideline with Docket No. 87D-0111. Two copies of any comments are to be submitted (except that individuals may submit single copies). Comments may be seen in the Docket Management Branch between 9 a.m. and 4 p.m., Monday through Friday.


John M. Taylor, Associate Commissioner for Regulatory Affairs.

[FR Doc. 87-8038 Filed 4-16-87; 8:45 am] BILLING CODE 4160-01-M.

Summary: The Food and Drug Administration (FDA) is announcing the availability of a report on adjunct studies of intraocular lenses (IOL's).
ADDRESS: Written requests for single copies of this report to Halyna Breslawec, address below. A copy of this report and any comment received on it may be seen at the Dockets Management Branch, Rm. 4–62, 5600 Fishers Lane, Rockville, MD 20857 from 9 a.m. to 4 p.m. Monday through Friday. (Send two self-addressed adhesive labels to assist the Branch in processing your requests.)

FOR FURTHER INFORMATION CONTACT: Halyna P Breslawec, Center for Devices and Radiological Health (HFZ-403). Food and Drug Administration, 8757 Georgia Ave., Silver Spring, MD 20910, 301–427–6162.

SUPPLEMENTARY INFORMATION: FDA is making available a report on its current policies and procedures regarding adjunct studies of IOL's. An adjunct study of an IOL is a clinical investigation in which an unlimited number of IOL's may be implanted under conditions requiring minimal adverse reaction data collection. FDA permitted adjunct studies of IOL's in response to section 520(l)(3)(D)(iii) of the Federal Food, Drug, and Cosmetic Act (the act) (21 U.S.C. 301 et seq.) to ensure that IOL's would be "reasonably available" to qualified experts while the safety and effectiveness of these devices were being investigated.

Although FDA's adjunct provisions have permitted widespread and immediate availability of new IOL's, such provisions have provided little benefit from a safety monitoring or data collection perspective. The availability of large numbers of IOL's through adjunct studies provided a disincentive to collect, analyze, and submit data to FDA in support of premarket approval applications.

Because many IOL's have not received premarket approval, FDA justification no longer exists for permitting adjunct studies of IOL's. FDA has developed a plan that is designed to improve control of IOL investigations and to gradually discontinue adjunct studies of IOL's. We recognize that the medical community and industry have become accustomed to relatively unencumbered use of investigational IOL's. However, the plan in this report approaches the changes in the policy with some caution to ensure that the availability of IOL's is not severely restricted. That innovation in IOL technology is not stifled, and that the impact of these changes on ophthalmic care and the industry is as minimal as possible. To accomplish these goals, the plan for discontinuing adjunct investigations is designed to be phased in over a period of approximately 3 years.


John M. Taylor, Associate Commissioner for Regulatory Affairs.

[FR Doc. 87–8940 Filed 4–19–87; 8:45 am]
BILLING CODE 4160–01–M

Health Resources and Services Administration
Final Funding Preferences for Grants for Faculty Development in Family Medicine

The Health Resources and Services Administration announces the final funding preferences which will govern the distribution of grant awards in Fiscal Year 1987 for Grants for Faculty Development in Family Medicine.

Section 786(a) of the Public Health Service Act authorizes the award of grants to public or nonprofit private hospitals, schools of medicine or osteopathy or other public or private nonprofit entities to assist in meeting the cost of planning, developing and operating programs for the training of physicians who plan to teach in family medicine training programs. In addition, section 786(a) authorizes assistance in meeting the cost of supporting physicians who are trainees in such programs and who plan to teach in a family medicine training program. As specified in the regulations for this program, 42 CFR 57.1605(b)(2)(iii), a funding preference will be accorded approved applications for projects which emphasize increasing the number of new faculty who will be teaching on a full-time basis in family medicine. In addition, funding preferences were proposed in the Federal Register of January 5, 1987 (52 FR 363) for applicants who provide directly or through affiliate medical schools, incentives for minority persons to enter academic medicine; and for applicants whose projects are designed to develop faculty competence for teaching geriatric content and/or develop educational materials for teaching geriatric content to family medicine students, residents and practitioners.

This program is not subject to the provisions of Executive Order 12371, Intergovernmental Review of Federal Programs or 45 CFR Part 100.

Dated: April 14, 1987

John H. Kelso, Acting Administrator.
[FR Doc. 87–8950 Filed 4–19–87; 8:45 am]
BILLING CODE 4160–15–M

Social Security Administration

[FR 48724]

Disability Advisory Council; Meetings

AGENCY: Social Security Administration, HHS.

ACTION: Notice of meetings.

SUMMARY: In accordance with the Federal Advisory Committee Act (Pub. L. 92–463), this notice announces the schedule and proposed agenda of forthcoming field hearings of the Disability Advisory Council (the Council). The Council is scheduling field hearings at which public officials, representatives of civic and public interest organizations, and concerned citizens may speak. This notice announces the third and fourth field hearings of the Council. No other field hearings are planned. In addition, this notice changes the location of the Council meeting scheduled May 21 and 22, 1987 that was published in the Federal Register on December 24, 1986, at 51 FR 46724.

DATE: See SUPPLEMENTARY INFORMATION.
The Council is established and governed by the provisions of section 12012 of Pub. L. 99-272. The Secretary has appointed the members of the Council in accordance with the provision of the statute. The Council is chaired by Dr. John E. Affeldt.

The purposes of the Council are to study and make recommendations on the medical and vocational aspects of disability under the Social Security and Supplemental Security Income (SSI) programs. The Council may engage technical assistance in order to carry out its purposes. Studies must include:

1. The effectiveness of vocational rehabilitation programs for Social Security and SSI beneficiaries; and
2. The question of using specialists to complete medical and vocational evaluations and the State agency disability decisionmaking level, including the question of requiring medical specialists to complete the medical portion of each case review and any assessment of residual functional capacity in other than mental impairments cases; (3) alternative approaches to work evaluation, the feasibility of providing work evaluation stipends, and screening criteria for work evaluation referrals; and (4) possible criteria for assessing the probability that an applicant or recipient of benefits based on disability will benefit from rehabilitation services.

Field Hearings

All field hearings are open to the public to the extent that space is available. Transcripts of the field hearings are available to the public on an at-cost-of duplication basis. The transcripts can be ordered from the Executive Director of the Council. The transcripts and all written submissions will become part of the record of these proceedings.

The Council will conduct these field hearings as an informal forum. After an opening statement by the chairperson, the public comment portion of the hearing will begin. The Council will accept requests to speak from public officials, representatives of civic and public interest organizations, and concerned citizens. As many speakers will be scheduled at each meeting site as time permits. Because the meeting hours will be limited, individuals are encouraged to speak about the issues on which they feel most strongly and to submit further written comments on other issues. Persons unable to speak at the meetings may submit written comments. In order to assure that everyone wishing to speak will be given the opportunity, the chairperson may limit the time allotted to each speaker.

Any public official, representative of an organization, or individual desiring to participate at a field hearing should write or telephone the Executive Director of the Council for the specific meeting information and provide the following: (1) Name; (2) business address; (3) telephone number during normal working hours; (4) capacity in which presentation will be made, i.e., public official, organization presentation, or citizen; and (5) time desired. Late requests and requests to speak received on the day of the meeting will be honored as time permits.


W. Douglas Badger,
Executive Director, Disability Advisory Council.

[FR Doc. 87-8848 Filed 4-16-87 8:45 am]
BOLLING CODE 4190-11-M

DEPARTMENT OF HOUSING URBAN DEVELOPMENT

Office of the Assistant Secretary for Community Planning and Development

[Docket No. N-87-1868; FR-2344]

Formula Allocations for the Rental Rehabilitation Program for FY 1987 and Deadlines for Submission of Program Descriptions

AGENCY: Office of the Assistant Secretary for Community Planning and Development,HUD.

ACTION: Notice.

SUMMARY: This notice announces the allocations of Rental Rehabilitation Program funds for cities with populations of 50,000 or more, urban counties, consortia of units of general local government, and States for Fiscal Year 1987 It also sets the dates by which Program Descriptions must be submitted to HUD for these potential grantees to be considered for actual grants based upon these allocations.

FOR FURTHER INFORMATION CONTACT: Mary Kolesar, Director, Rehabilitation Management Division, Room 7162, Department of Housing and Urban Development, 451 Seventh Street SW., Washington, DC, Telephone (202) 755-5870. (This is not a toll-free number).

SUPPLEMENTARY INFORMATION:

Formula Allocations

The Rental Rehabilitation Program is authorized by section 17 of the United States Housing Act of 1937 (42 U.S.C. 1437o), hereafter referred to as section 17. The Program’s interim regulations are published at 24 CFR Part 511. Section 511.30 contains the formula for allocating Rental Rehabilitation Program funds. Cities having a population of 50,000 or more, urban counties, consortia of units of general local government having a combined population of 50,000 or more, and States are eligible to receive formula allocations. The amount of rental rehabilitation grant funds available for allocation in Fiscal Year 1987 is $200 million.

Appendix A to this notice contains the formula allocations for cities, urban counties and consortia that receive an allocation of $50,000 or more. Appendix B to this notice contains the allocations for States.

The eligibility of cities with populations of 50,000 or more and urban counties for formula allocations is determined by whether they were so classified for purposes of the
Community Development Block Grant Entitlement Program (24 CFR Part 570) for Federal Fiscal Year 1986. All allocation amounts have been rounded to the nearest thousand. The formula factors for allocating the Fiscal Year 1987 funds are the same as those used in Fiscal Years 1984, 1985 and 1986. By separate publication, HUD is suspending the application of § 511.32, which would have otherwise mandated the further adjustment of potential grantees' formula allocations for Fiscal Year 1987 based upon certain performance adjustment factors contained in § 511.32. The reasons for the suspension are explained in the separate publication.

Concerning the 1984 legislative amendment that the Secretary assure that an equitable share of funds be used to provide units for families with children, particularly large families requiring three or more bedroom units, the Department has determined for Fiscal Year 1987 that the three or more bedroom priority can be satisfied if at least 15 percent of the Rental Rehabilitation Program grant amounts expended nationwide are expended for rehabilitation of units of three or more bedrooms. The existing requirement in § 511.10(k) that grantees use at least 70 percent of their grant funds to provide two or more bedroom units, unless otherwise approved by HUD under the criteria in that section, remains in effect. The Department reserves the right prospectively to establish a mandatory standard for each grantee for achievement of three-bedroom and larger units should the data (which will be continually available) indicate any substantial prospect that the Secretary will not achieve the mandated minimum within any two-year period.

**Deadline for Submitting Program Description**

Section 511.20(a) of the Program regulations states that cities, urban counties and consortia eligible to receive a grant based on a formula allocation must submit a Program Description to the appropriate HUD Field Office within 45 days of written notification of their Rental Rehabilitation fund allocation, and that States have 75 days from the date of written notification of their allocations to submit their Program Descriptions. HUD deems the date of written notification to all grantees eligible for a formula allocation to be the date of this notice.

Thus, all cities, urban counties and consortia receiving a formula allocation must deliver their Program Descriptions to the appropriate HUD Field Office or have them postmarked no later than June 1, 1987 to be considered for a grant. If a State elects to administer the Rental Rehabilitation Program in Fiscal Year 1987 it must notify HUD in writing of its intent to participate in the program by May 18, 1987 and must deliver its Program Description or have it postmarked by June 30, 1987 to be considered for a grant.

If a State chooses not to participate in the Rental Rehabilitation Program, eligible units of general local government located in the State that wish to participate in the HUD Administered State Program must submit a Program Description to the responsible HUD Field Office within 45 days of the date stated in a written notification from HUD to such potential grantees of fund availability under the program for the fiscal year. These notifications will be directly issued by HUD Field Offices when it is known which States, if any, are not participating in Fiscal Year 1987.

**Section 8 Housing Vouchers in Support of the Rental Rehabilitation Program**

When Field Offices approve Program Descriptions for grantees, or as soon as possible thereafter, they should also reserve the appropriate amount of section 8 funds in support of the locality's or State's Rental Rehabilitation Program. If they have not already been received, the section 8 funds will be assigned to Field Offices soon. Up to on Section 8 Housing Voucher will eventually be provided for each $7,500 of Fiscal Year 1987 rehabilitation grant funds allocated to a grantee, although no more than 10,000 vouchers will be made available in 1987 under the current appropriation.

If the area city/urban county formula grantees that had Rental Rehabilitation Program grant funds deobligated or additional funds reallocated under § 511.33(c) late in Fiscal Year 1986 or earlier this fiscal year, adjustments should be made in the Section 8 funds allocated in support of local Rental Rehabilitation Programs for this fiscal year. Further instructions will be sent to Field Offices concerning the allocation of vouchers and adjustments that should be made for reallocations of rental rehabilitation grant funds, but Field Offices need to be aware that these adjustments are to be made.

**Other Matters**


The Catalog of Federal Domestic Assistance program number is 14.230, Rental Housing Rehabilitation.

The collection of information requirements contained in this notice have been approved by the Office of Management and Budget (OMB) under the provisions of the Paperwork Reduction Act of 1980 (44 U.S.C. 3501-3520) and have been assigned OMB Control No. 2506-0078.


Dated: April 7, 1987

Jack R. Stokvis,
General Deputy Assistant Secretary for Community Planning and Development.
### RENTAL REHABILITATION PROGRAM

#### FORMULA ALLOCATIONS

**CITIES, URBAN COUNTIES AND CONSORTIA**

**FISCAL YEAR 1987**

<table>
<thead>
<tr>
<th>STATE</th>
<th>LOCALITY</th>
<th>TYPE OF LOCALITY*</th>
<th>$ IN THOUSANDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALABAMA</td>
<td>BIRMINGHAM</td>
<td>51</td>
<td>492</td>
</tr>
<tr>
<td></td>
<td>GOTHAN</td>
<td>51</td>
<td>53</td>
</tr>
<tr>
<td></td>
<td>MOUNTVILLE</td>
<td>51</td>
<td>115</td>
</tr>
<tr>
<td></td>
<td>MOBILE</td>
<td>51</td>
<td>225</td>
</tr>
<tr>
<td></td>
<td>MONTGOMERY</td>
<td>51</td>
<td>207</td>
</tr>
<tr>
<td></td>
<td>TUSCALOOSA</td>
<td>51</td>
<td>121</td>
</tr>
<tr>
<td></td>
<td>JEFFERSON COUNTY</td>
<td>68</td>
<td>174</td>
</tr>
<tr>
<td>ALASKA</td>
<td>ANCHORAGE</td>
<td>51</td>
<td>130</td>
</tr>
<tr>
<td>ARIZONA</td>
<td>GLENDALE</td>
<td>52</td>
<td>72</td>
</tr>
<tr>
<td></td>
<td>MESA</td>
<td>51</td>
<td>105</td>
</tr>
<tr>
<td></td>
<td>PHOENIX</td>
<td>51</td>
<td>719</td>
</tr>
<tr>
<td></td>
<td>SCOTTSDALE</td>
<td>51</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>TEMPE</td>
<td>51</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>TUCSON</td>
<td>51</td>
<td>416</td>
</tr>
<tr>
<td></td>
<td>MARICOPA COUNTY</td>
<td>66</td>
<td>133</td>
</tr>
<tr>
<td></td>
<td>PIMA COUNTY</td>
<td>66</td>
<td>86</td>
</tr>
<tr>
<td>ARKANSAS</td>
<td>FORT SMITH</td>
<td>51</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>LITTLE ROCK</td>
<td>51</td>
<td>178</td>
</tr>
<tr>
<td></td>
<td>NORTH LITTLE ROCK</td>
<td>51</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>PINE BLUFF</td>
<td>51</td>
<td>73</td>
</tr>
<tr>
<td>CALIFORNIA</td>
<td>ALAMEDA</td>
<td>52</td>
<td>86</td>
</tr>
<tr>
<td></td>
<td>ALHAMBRA</td>
<td>52</td>
<td>94</td>
</tr>
<tr>
<td></td>
<td>ANAHEIM</td>
<td>51</td>
<td>239</td>
</tr>
<tr>
<td></td>
<td>BAKERSFIELD</td>
<td>51</td>
<td>113</td>
</tr>
<tr>
<td></td>
<td>BELLFLOWER</td>
<td>51</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td>BERKELEY</td>
<td>51</td>
<td>284</td>
</tr>
<tr>
<td></td>
<td>BURBANK</td>
<td>51</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>CHULA VISTA</td>
<td>52</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>COMPTON</td>
<td>52</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>CONCORD</td>
<td>52</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td>COSTA MESA</td>
<td>52</td>
<td>107</td>
</tr>
<tr>
<td></td>
<td>DALY</td>
<td>52</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>DOWNING</td>
<td>52</td>
<td>74</td>
</tr>
<tr>
<td></td>
<td>EL CAJON</td>
<td>52</td>
<td>103</td>
</tr>
<tr>
<td></td>
<td>EL MONTE</td>
<td>52</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td>ESCONDIDO CITY</td>
<td>51</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>FREMONT</td>
<td>52</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>FREMONT</td>
<td>51</td>
<td>300</td>
</tr>
<tr>
<td></td>
<td>FULLERTON</td>
<td>52</td>
<td>107</td>
</tr>
<tr>
<td></td>
<td>GARDEN GROVE</td>
<td>53</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>GLENDALE</td>
<td>52</td>
<td>227</td>
</tr>
<tr>
<td></td>
<td>HAYWARD</td>
<td>52</td>
<td>86</td>
</tr>
<tr>
<td></td>
<td>HUNTINGTON BEACH</td>
<td>52</td>
<td>140</td>
</tr>
<tr>
<td></td>
<td>INGLEWOOD</td>
<td>53</td>
<td>168</td>
</tr>
<tr>
<td></td>
<td>LA MESA CITY</td>
<td>52</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>LONG BEACH</td>
<td>51</td>
<td>674</td>
</tr>
<tr>
<td></td>
<td>LOS ANGELES</td>
<td>51</td>
<td>5726</td>
</tr>
<tr>
<td></td>
<td>LYNNWOOD</td>
<td>52</td>
<td>61</td>
</tr>
<tr>
<td></td>
<td>MODESTO</td>
<td>51</td>
<td>101</td>
</tr>
<tr>
<td></td>
<td>MONTEBELLO</td>
<td>52</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>MONTEREY PARK</td>
<td>52</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>MOUNTAIN VIEW</td>
<td>52</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>NATIONAL CITY</td>
<td>52</td>
<td>73</td>
</tr>
<tr>
<td></td>
<td>NEWPORT BEACH</td>
<td>52</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>NORTWALK</td>
<td>52</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>OAKLAND</td>
<td>51</td>
<td>728</td>
</tr>
<tr>
<td></td>
<td>OCEANSIDE</td>
<td>52</td>
<td>89</td>
</tr>
<tr>
<td></td>
<td>ONTARIO</td>
<td>52</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>ORANGE</td>
<td>52</td>
<td>72</td>
</tr>
<tr>
<td></td>
<td>OXNARD</td>
<td>51</td>
<td>109</td>
</tr>
<tr>
<td></td>
<td>PALO ALTO</td>
<td>51</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>PASADENA</td>
<td>51</td>
<td>201</td>
</tr>
<tr>
<td></td>
<td>POCOMBA</td>
<td>51</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>REDWOOD BEACH</td>
<td>52</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>REDWOOD CITY</td>
<td>52</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>RICHMOND</td>
<td>52</td>
<td>88</td>
</tr>
<tr>
<td>STATE</td>
<td>LOCALITY</td>
<td>TYPE OF LOCALITY</td>
<td>$ IN THOUSANDS</td>
</tr>
<tr>
<td>-------</td>
<td>----------</td>
<td>-----------------</td>
<td>---------------</td>
</tr>
<tr>
<td>FLORIDA</td>
<td>JACKSONVILLE</td>
<td>51</td>
<td>577</td>
</tr>
<tr>
<td></td>
<td>LAKEWOOD</td>
<td>51</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>MIAMI</td>
<td>51</td>
<td>924</td>
</tr>
<tr>
<td></td>
<td>MIAMI BEACH</td>
<td>51</td>
<td>440</td>
</tr>
<tr>
<td></td>
<td>ORLANDO</td>
<td>51</td>
<td>184</td>
</tr>
<tr>
<td></td>
<td>PENSACOLA</td>
<td>51</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>POMPANO BEACH</td>
<td>51</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>ST PETERSBURG</td>
<td>51</td>
<td>301</td>
</tr>
<tr>
<td></td>
<td>SARASOTA</td>
<td>51</td>
<td>64</td>
</tr>
<tr>
<td></td>
<td>TALLAHASSEE</td>
<td>51</td>
<td>172</td>
</tr>
<tr>
<td></td>
<td>TAMPA</td>
<td>51</td>
<td>357</td>
</tr>
<tr>
<td></td>
<td>WEST PALM BEACH</td>
<td>51</td>
<td>110</td>
</tr>
<tr>
<td></td>
<td>BREVARD COUNTY</td>
<td>66</td>
<td>90</td>
</tr>
<tr>
<td></td>
<td>BRODOW COUNTY</td>
<td>66</td>
<td>367</td>
</tr>
<tr>
<td></td>
<td>DADE COUNTY</td>
<td>66</td>
<td>838</td>
</tr>
<tr>
<td></td>
<td>HILLSBOROUGH COUNTY</td>
<td>66</td>
<td>232</td>
</tr>
<tr>
<td></td>
<td>ORANGE COUNTY</td>
<td>66</td>
<td>249</td>
</tr>
<tr>
<td></td>
<td>PALM BEACH COUNTY</td>
<td>66</td>
<td>254</td>
</tr>
<tr>
<td></td>
<td>PASCO COUNTY</td>
<td>66</td>
<td>81</td>
</tr>
<tr>
<td></td>
<td>PINELLAS COUNTY</td>
<td>66</td>
<td>180</td>
</tr>
<tr>
<td></td>
<td>POLK COUNTY</td>
<td>66</td>
<td>155</td>
</tr>
<tr>
<td></td>
<td>SEMINOLE COUNTY</td>
<td>66</td>
<td>103</td>
</tr>
<tr>
<td></td>
<td>VOLUSIA COUNTY</td>
<td>66</td>
<td>130</td>
</tr>
<tr>
<td>GEORGIA</td>
<td>ALBANY</td>
<td>51</td>
<td>127</td>
</tr>
<tr>
<td></td>
<td>ATLANTA</td>
<td>51</td>
<td>862</td>
</tr>
<tr>
<td></td>
<td>COLUMBUS</td>
<td>51</td>
<td>230</td>
</tr>
<tr>
<td></td>
<td>MACON</td>
<td>51</td>
<td>197</td>
</tr>
<tr>
<td></td>
<td>SAVANNAH</td>
<td>51</td>
<td>242</td>
</tr>
<tr>
<td></td>
<td>COBB COUNTY</td>
<td>66</td>
<td>127</td>
</tr>
<tr>
<td></td>
<td>DE KALB COUNTY</td>
<td>66</td>
<td>295</td>
</tr>
<tr>
<td></td>
<td>FULTON COUNTY</td>
<td>66</td>
<td>171</td>
</tr>
<tr>
<td></td>
<td>GWINNETT COUNTY</td>
<td>66</td>
<td>60</td>
</tr>
<tr>
<td>MARYLAND</td>
<td>BALTIMORE</td>
<td>51</td>
<td>1723</td>
</tr>
<tr>
<td></td>
<td>BALTIMORE COUNTY</td>
<td>66</td>
<td>351</td>
</tr>
<tr>
<td></td>
<td>MONTGOMERY COUNTY</td>
<td>66</td>
<td>306</td>
</tr>
<tr>
<td></td>
<td>PRINCE GEORGE COUNTY</td>
<td>66</td>
<td>423</td>
</tr>
<tr>
<td>IDAHO</td>
<td>BOISE</td>
<td>51</td>
<td>96</td>
</tr>
<tr>
<td>ILLINOIS</td>
<td>AURORA</td>
<td>51</td>
<td>69</td>
</tr>
<tr>
<td></td>
<td>CHICAGO</td>
<td>51</td>
<td>7124</td>
</tr>
<tr>
<td></td>
<td>CHICAGO</td>
<td>51</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>EAST ST LOUIS</td>
<td>51</td>
<td>137</td>
</tr>
<tr>
<td></td>
<td>ELGIN</td>
<td>51</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>EVANS</td>
<td>51</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>JOLIET</td>
<td>51</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>OAK PARK</td>
<td>52</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>PEORIA</td>
<td>51</td>
<td>147</td>
</tr>
<tr>
<td></td>
<td>ROCKFORD</td>
<td>51</td>
<td>143</td>
</tr>
<tr>
<td></td>
<td>SPRINGFIELD</td>
<td>51</td>
<td>122</td>
</tr>
<tr>
<td></td>
<td>WAUKESHA</td>
<td>51</td>
<td>62</td>
</tr>
<tr>
<td></td>
<td>WOOLLICH</td>
<td>66</td>
<td>666</td>
</tr>
<tr>
<td></td>
<td>DU PAGE COUNTY</td>
<td>66</td>
<td>202</td>
</tr>
<tr>
<td></td>
<td>LAKE COUNTY</td>
<td>66</td>
<td>122</td>
</tr>
<tr>
<td></td>
<td>MASON COUNTY</td>
<td>66</td>
<td>184</td>
</tr>
<tr>
<td></td>
<td>ST CLAIR COUNTY</td>
<td>66</td>
<td>158</td>
</tr>
<tr>
<td></td>
<td>WELLS COUNTY</td>
<td>66</td>
<td>62</td>
</tr>
<tr>
<td>INDIANA</td>
<td>ANDERSON</td>
<td>51</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>BLOOMINGTON</td>
<td>51</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>EVANSVILLE</td>
<td>51</td>
<td>163</td>
</tr>
<tr>
<td></td>
<td>FORT WAYNE</td>
<td>51</td>
<td>178</td>
</tr>
<tr>
<td></td>
<td>GARY</td>
<td>51</td>
<td>192</td>
</tr>
<tr>
<td></td>
<td>HAMMOND</td>
<td>51</td>
<td>91</td>
</tr>
<tr>
<td></td>
<td>INDIANAPOLIS</td>
<td>51</td>
<td>752</td>
</tr>
<tr>
<td></td>
<td>MUNCIE</td>
<td>51</td>
<td>117</td>
</tr>
<tr>
<td></td>
<td>SOUTH BEND</td>
<td>51</td>
<td>108</td>
</tr>
<tr>
<td></td>
<td>TERRE HAUTE</td>
<td>51</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>LAKE COUNTY</td>
<td>66</td>
<td>75</td>
</tr>
<tr>
<td>IOWA</td>
<td>CEDAR RAPIDS</td>
<td>51</td>
<td>88</td>
</tr>
<tr>
<td></td>
<td>COUNCIL BLUFFS</td>
<td>51</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>DAVENPORT</td>
<td>51</td>
<td>118</td>
</tr>
<tr>
<td></td>
<td>DES MOINES</td>
<td>51</td>
<td>222</td>
</tr>
<tr>
<td></td>
<td>DUBUQUE</td>
<td>51</td>
<td>63</td>
</tr>
<tr>
<td>MICHIGAN</td>
<td>ANN ARBOR</td>
<td>51</td>
<td>177</td>
</tr>
<tr>
<td></td>
<td>BATTLE CREEK</td>
<td>51</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>DETROIT</td>
<td>51</td>
<td>244</td>
</tr>
<tr>
<td></td>
<td>FLINT</td>
<td>51</td>
<td>206</td>
</tr>
<tr>
<td></td>
<td>GRAND RAPIDS</td>
<td>51</td>
<td>247</td>
</tr>
<tr>
<td></td>
<td>KALAMAZOO</td>
<td>51</td>
<td>154</td>
</tr>
<tr>
<td></td>
<td>LANSING</td>
<td>51</td>
<td>174</td>
</tr>
<tr>
<td></td>
<td>PONTIAC</td>
<td>51</td>
<td>103</td>
</tr>
<tr>
<td></td>
<td>SAGINAW</td>
<td>51</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td>GENESSEE COUNTY</td>
<td>66</td>
<td>118</td>
</tr>
<tr>
<td></td>
<td>HENRY COUNTY</td>
<td>66</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>MACOMB COUNTY</td>
<td>66</td>
<td>82</td>
</tr>
<tr>
<td></td>
<td>DAKOTA COUNTY</td>
<td>66</td>
<td>197</td>
</tr>
<tr>
<td></td>
<td>WAYNE COUNTY</td>
<td>66</td>
<td>224</td>
</tr>
<tr>
<td>MINNESOTA</td>
<td>DULUTH</td>
<td>51</td>
<td>144</td>
</tr>
<tr>
<td></td>
<td>MINNEAPOLIS</td>
<td>51</td>
<td>708</td>
</tr>
<tr>
<td></td>
<td>ROCHESTER</td>
<td>51</td>
<td>52</td>
</tr>
<tr>
<td>STATE</td>
<td>LOCALITY</td>
<td>TYPE OF LOCALITY</td>
<td>$ IN THOUSANDS</td>
</tr>
<tr>
<td>----------</td>
<td>---------------</td>
<td>------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>MINNESOTA</td>
<td>ST PAUL</td>
<td>51</td>
<td>243</td>
</tr>
<tr>
<td></td>
<td>ANDRA COUNTY</td>
<td>66</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>DAKOTA COUNTY</td>
<td>66</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>HENNEPIN COUNTY</td>
<td>66</td>
<td>215</td>
</tr>
<tr>
<td></td>
<td>RAMSEY COUNTY</td>
<td>66</td>
<td>75</td>
</tr>
<tr>
<td>MISSISSIPPI</td>
<td>JACKSON</td>
<td>51</td>
<td>234</td>
</tr>
<tr>
<td>MISSOURI</td>
<td>COLUMBIA</td>
<td>51</td>
<td>99</td>
</tr>
<tr>
<td></td>
<td>INDEPENDENCE</td>
<td>52</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>KANSAS CITY</td>
<td>51</td>
<td>810</td>
</tr>
<tr>
<td></td>
<td>ST JOSEPH</td>
<td>51</td>
<td>94</td>
</tr>
<tr>
<td></td>
<td>ST LOUIS</td>
<td>51</td>
<td>1061</td>
</tr>
<tr>
<td></td>
<td>SPRINGFIELD</td>
<td>51</td>
<td>167</td>
</tr>
<tr>
<td></td>
<td>ST LOUIS COUNTY</td>
<td>66</td>
<td>362</td>
</tr>
<tr>
<td>MONTANA</td>
<td>BILLINGS</td>
<td>51</td>
<td>81</td>
</tr>
<tr>
<td></td>
<td>GREAT FALLS</td>
<td>51</td>
<td>65</td>
</tr>
<tr>
<td>NEBRASKA</td>
<td>LINCOLN</td>
<td>51</td>
<td>182</td>
</tr>
<tr>
<td></td>
<td>OMAHA</td>
<td>51</td>
<td>361</td>
</tr>
<tr>
<td>NEVADA</td>
<td>LAS VEGAS</td>
<td>51</td>
<td>192</td>
</tr>
<tr>
<td></td>
<td>RENO</td>
<td>51</td>
<td>147</td>
</tr>
<tr>
<td></td>
<td>CLARK COUNTY</td>
<td>66</td>
<td>262</td>
</tr>
<tr>
<td>NEW HAMPSHIRE</td>
<td>MANCHESTER</td>
<td>51</td>
<td>161</td>
</tr>
<tr>
<td></td>
<td>NASHUA</td>
<td>51</td>
<td>76</td>
</tr>
<tr>
<td>NEW JERSEY</td>
<td>BAYONNE</td>
<td>52</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>CAMDEN</td>
<td>51</td>
<td>192</td>
</tr>
<tr>
<td></td>
<td>CLIFTON</td>
<td>52</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>EAST ORANGE</td>
<td>52</td>
<td>188</td>
</tr>
<tr>
<td></td>
<td>ELIZABETH</td>
<td>51</td>
<td>216</td>
</tr>
<tr>
<td></td>
<td>IRVINGTON</td>
<td>52</td>
<td>135</td>
</tr>
<tr>
<td></td>
<td>JERSEY CITY</td>
<td>51</td>
<td>809</td>
</tr>
<tr>
<td></td>
<td>NEWARK</td>
<td>51</td>
<td>1087</td>
</tr>
<tr>
<td></td>
<td>PASSAIC</td>
<td>52</td>
<td>173</td>
</tr>
<tr>
<td></td>
<td>PATERSON</td>
<td>51</td>
<td>381</td>
</tr>
<tr>
<td></td>
<td>TRENTON</td>
<td>51</td>
<td>199</td>
</tr>
<tr>
<td></td>
<td>UNION CITY</td>
<td>52</td>
<td>175</td>
</tr>
<tr>
<td></td>
<td>BERGEN COUNTY</td>
<td>66</td>
<td>543</td>
</tr>
<tr>
<td></td>
<td>BURLINGTON COUNTY</td>
<td>66</td>
<td>144</td>
</tr>
<tr>
<td></td>
<td>CAMDEN COUNTY</td>
<td>66</td>
<td>159</td>
</tr>
<tr>
<td></td>
<td>ESSEX COUNTY</td>
<td>66</td>
<td>261</td>
</tr>
<tr>
<td></td>
<td>GLOUCESTER COUNTY</td>
<td>66</td>
<td>119</td>
</tr>
<tr>
<td></td>
<td>HUDSON COUNTY</td>
<td>66</td>
<td>464</td>
</tr>
<tr>
<td></td>
<td>MIDDLESEX COUNTY</td>
<td>66</td>
<td>139</td>
</tr>
<tr>
<td></td>
<td>MONMOUTH COUNTY</td>
<td>66</td>
<td>241</td>
</tr>
<tr>
<td></td>
<td>MORRIS COUNTY</td>
<td>66</td>
<td>127</td>
</tr>
<tr>
<td></td>
<td>OCEAN COUNTY</td>
<td>66</td>
<td>114</td>
</tr>
<tr>
<td></td>
<td>SOMERSET COUNTY</td>
<td>66</td>
<td>99</td>
</tr>
<tr>
<td></td>
<td>UNION COUNTY</td>
<td>66</td>
<td>220</td>
</tr>
<tr>
<td>NEW MEXICO</td>
<td>ALBUQUERQUE</td>
<td>51</td>
<td>340</td>
</tr>
<tr>
<td></td>
<td>LAS CRUCES</td>
<td>51</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>SANTA FE</td>
<td>51</td>
<td>55</td>
</tr>
<tr>
<td>NEW YORK</td>
<td>ALBANY</td>
<td>51</td>
<td>261</td>
</tr>
<tr>
<td></td>
<td>AMHERST TOWN</td>
<td>52</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>BABYLON TOWN</td>
<td>52</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>BINGHAMTON</td>
<td>51</td>
<td>131</td>
</tr>
<tr>
<td></td>
<td>BUFFALO</td>
<td>51</td>
<td>1003</td>
</tr>
<tr>
<td></td>
<td>HUNTINGTON TOWN</td>
<td>52</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>ILLIS TOWN</td>
<td>52</td>
<td>131</td>
</tr>
<tr>
<td></td>
<td>MOUNT VERNON</td>
<td>62</td>
<td>158</td>
</tr>
<tr>
<td></td>
<td>NEW ROCHELLE</td>
<td>52</td>
<td>103</td>
</tr>
<tr>
<td></td>
<td>NEW YORK</td>
<td>51</td>
<td>30917</td>
</tr>
<tr>
<td></td>
<td>NIAGARA FALLS</td>
<td>51</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td>ROCHESTER</td>
<td>51</td>
<td>540</td>
</tr>
<tr>
<td></td>
<td>SCHENECTADY</td>
<td>51</td>
<td>146</td>
</tr>
<tr>
<td></td>
<td>SYRACUSE</td>
<td>51</td>
<td>409</td>
</tr>
<tr>
<td></td>
<td>TROY</td>
<td>51</td>
<td>126</td>
</tr>
<tr>
<td></td>
<td>UNION TOWN</td>
<td>53</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>UTICA</td>
<td>51</td>
<td>171</td>
</tr>
<tr>
<td></td>
<td>YONKERS</td>
<td>52</td>
<td>321</td>
</tr>
<tr>
<td></td>
<td>BUTCHER COUNTY</td>
<td>66</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>ERIE COUNTY</td>
<td>66</td>
<td>129</td>
</tr>
<tr>
<td></td>
<td>MONROE COUNTY</td>
<td>66</td>
<td>125</td>
</tr>
<tr>
<td></td>
<td>NASSAU COUNTY</td>
<td>66</td>
<td>568</td>
</tr>
<tr>
<td></td>
<td>ONONDAGA COUNTY</td>
<td>66</td>
<td>93</td>
</tr>
<tr>
<td></td>
<td>ORANGE COUNTY</td>
<td>66</td>
<td>141</td>
</tr>
<tr>
<td></td>
<td>ROCKLAND COUNTY</td>
<td>66</td>
<td>151</td>
</tr>
<tr>
<td></td>
<td>SUFFOLK COUNTY</td>
<td>66</td>
<td>240</td>
</tr>
<tr>
<td></td>
<td>WESTCHESTER COUNTY</td>
<td>66</td>
<td>298</td>
</tr>
<tr>
<td></td>
<td>ASHEVILLE</td>
<td>51</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>CHARLOTTE</td>
<td>51</td>
<td>337</td>
</tr>
<tr>
<td></td>
<td>DURHAM</td>
<td>51</td>
<td>184</td>
</tr>
<tr>
<td></td>
<td>FAYETTEVILLE</td>
<td>51</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>GREENSBORO</td>
<td>51</td>
<td>164</td>
</tr>
<tr>
<td></td>
<td>HIGH POINT</td>
<td>51</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>RALEIGH</td>
<td>51</td>
<td>181</td>
</tr>
<tr>
<td></td>
<td>WINSTON SALEM</td>
<td>51</td>
<td>188</td>
</tr>
<tr>
<td></td>
<td>AKRON</td>
<td>51</td>
<td>223</td>
</tr>
<tr>
<td></td>
<td>CANTON</td>
<td>51</td>
<td>122</td>
</tr>
<tr>
<td></td>
<td>CINCINNATI</td>
<td>51</td>
<td>868</td>
</tr>
<tr>
<td></td>
<td>CLEVELAND</td>
<td>51</td>
<td>1365</td>
</tr>
<tr>
<td></td>
<td>CLEVELAND HEIGHTS</td>
<td>52</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>COLUMBUS</td>
<td>51</td>
<td>918</td>
</tr>
<tr>
<td></td>
<td>DAYTON</td>
<td>51</td>
<td>393</td>
</tr>
<tr>
<td></td>
<td>HAMILTON CITY</td>
<td>51</td>
<td>91</td>
</tr>
<tr>
<td></td>
<td>LAKEWOOD</td>
<td>51</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>LORAIN</td>
<td>51</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>MANSFIELD</td>
<td>51</td>
<td>73</td>
</tr>
<tr>
<td></td>
<td>SPRINGFIELD</td>
<td>51</td>
<td>121</td>
</tr>
<tr>
<td></td>
<td>TOLEDO</td>
<td>51</td>
<td>481</td>
</tr>
<tr>
<td></td>
<td>WARREN</td>
<td>51</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>YORKSTOWN</td>
<td>51</td>
<td>183</td>
</tr>
<tr>
<td></td>
<td>CUMAMOGA COUNTY</td>
<td>66</td>
<td>308</td>
</tr>
<tr>
<td></td>
<td>FRANKLIN COUNTY</td>
<td>66</td>
<td>125</td>
</tr>
<tr>
<td></td>
<td>HAMILTON COUNTY</td>
<td>66</td>
<td>213</td>
</tr>
<tr>
<td></td>
<td>LAKE COUNTY</td>
<td>66</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>MONROE COUNTY</td>
<td>66</td>
<td>148</td>
</tr>
<tr>
<td></td>
<td>STARK COUNTY</td>
<td>66</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>SUMMIT COUNTY</td>
<td>66</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>LAWTON</td>
<td>51</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>NORMAN</td>
<td>51</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>OKLAHOMA CITY</td>
<td>51</td>
<td>431</td>
</tr>
<tr>
<td></td>
<td>TULSA</td>
<td>51</td>
<td>381</td>
</tr>
<tr>
<td></td>
<td>EUGENE</td>
<td>51</td>
<td>181</td>
</tr>
<tr>
<td></td>
<td>PORTLAND</td>
<td>51</td>
<td>656</td>
</tr>
<tr>
<td></td>
<td>SALEM</td>
<td>51</td>
<td>313</td>
</tr>
<tr>
<td></td>
<td>CLACKAMAS COUNTY</td>
<td>66</td>
<td>114</td>
</tr>
<tr>
<td></td>
<td>MULTNOMAH COUNTY</td>
<td>66</td>
<td>162</td>
</tr>
<tr>
<td></td>
<td>WAYNE COUNTY</td>
<td>66</td>
<td>164</td>
</tr>
<tr>
<td></td>
<td>PENNSYLVANIA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ALLENTOWN</td>
<td>51</td>
<td>154</td>
</tr>
<tr>
<td></td>
<td>ALTOONA</td>
<td>51</td>
<td>72</td>
</tr>
<tr>
<td></td>
<td>BETHLEHEM</td>
<td>51</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>ERIE</td>
<td>51</td>
<td>188</td>
</tr>
<tr>
<td></td>
<td>HARRISBURG</td>
<td>51</td>
<td>111</td>
</tr>
<tr>
<td></td>
<td>LANCASTER</td>
<td>51</td>
<td>109</td>
</tr>
<tr>
<td></td>
<td>PHILADELPHIA</td>
<td>51</td>
<td>3140</td>
</tr>
<tr>
<td></td>
<td>PITTSBURGH</td>
<td>51</td>
<td>927</td>
</tr>
<tr>
<td></td>
<td>READING</td>
<td>51</td>
<td>164</td>
</tr>
<tr>
<td></td>
<td>SCRANTON</td>
<td>51</td>
<td>142</td>
</tr>
<tr>
<td></td>
<td>UPPER DARBY</td>
<td>52</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td>ALLEGHENY COUNTY</td>
<td>66</td>
<td>655</td>
</tr>
<tr>
<td></td>
<td>BEAVER COUNTY</td>
<td>66</td>
<td>139</td>
</tr>
<tr>
<td></td>
<td>BERKS COUNTY</td>
<td>66</td>
<td>97</td>
</tr>
<tr>
<td>STATE</td>
<td>LOCALITY</td>
<td>TYPE OF LOCALITY</td>
<td>$ IN THOUSANDS</td>
</tr>
<tr>
<td>---------------</td>
<td>----------------</td>
<td>-----------------</td>
<td>---------------</td>
</tr>
<tr>
<td>PENNSYLVANIA</td>
<td>BUCKS COUNTY</td>
<td>68</td>
<td>165</td>
</tr>
<tr>
<td></td>
<td>CHESTER COUNTY</td>
<td>68</td>
<td>170</td>
</tr>
<tr>
<td></td>
<td>DELAWARE COUNTY</td>
<td>68</td>
<td>213</td>
</tr>
<tr>
<td></td>
<td>LANCASTER COUNTY</td>
<td>68</td>
<td>189</td>
</tr>
<tr>
<td></td>
<td>LUCERNE COUNTY</td>
<td>68</td>
<td>168</td>
</tr>
<tr>
<td></td>
<td>MONTGOMERY COUNTY</td>
<td>68</td>
<td>232</td>
</tr>
<tr>
<td></td>
<td>WASHINGTON COUNTY</td>
<td>68</td>
<td>176</td>
</tr>
<tr>
<td></td>
<td>WESTMORELAND COUNTY</td>
<td>68</td>
<td>172</td>
</tr>
<tr>
<td></td>
<td>YORK COUNTY</td>
<td>68</td>
<td>118</td>
</tr>
<tr>
<td>RHODE ISLAND</td>
<td>CRAWFORD</td>
<td>52</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>PASTUKEET</td>
<td>51</td>
<td>135</td>
</tr>
<tr>
<td></td>
<td>PROVIDENCE</td>
<td>51</td>
<td>462</td>
</tr>
<tr>
<td></td>
<td>WARWICK</td>
<td>52</td>
<td>53</td>
</tr>
<tr>
<td>SOUTH CAROLINA</td>
<td>CHARLESTON</td>
<td>51</td>
<td>154</td>
</tr>
<tr>
<td></td>
<td>COLUMBIA</td>
<td>51</td>
<td>149</td>
</tr>
<tr>
<td></td>
<td>GREENVILLE</td>
<td>51</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>NORTH CHARLESTON</td>
<td>52</td>
<td>78</td>
</tr>
<tr>
<td></td>
<td>GREENVILLE COUNTY</td>
<td>66</td>
<td>149</td>
</tr>
<tr>
<td>SOUTH DAKOTA</td>
<td>SIOUX FALLS</td>
<td>51</td>
<td>83</td>
</tr>
<tr>
<td>TENNESSEE</td>
<td>CHATTANOOGA</td>
<td>51</td>
<td>242</td>
</tr>
<tr>
<td></td>
<td>CLARKSVILLE</td>
<td>51</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>JACKSON</td>
<td>51</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>KNOXVILLE</td>
<td>51</td>
<td>286</td>
</tr>
<tr>
<td></td>
<td>MEMPHIS</td>
<td>51</td>
<td>869</td>
</tr>
<tr>
<td></td>
<td>NASHVILLE-DAVIDSON</td>
<td>51</td>
<td>494</td>
</tr>
<tr>
<td></td>
<td>CONSORT W/CITY-KGFT-BRTL</td>
<td>67</td>
<td>112</td>
</tr>
<tr>
<td>TEXAS</td>
<td>ABILENE</td>
<td>51</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>AMARILLO</td>
<td>51</td>
<td>113</td>
</tr>
<tr>
<td></td>
<td>ARLINGTON</td>
<td>51</td>
<td>125</td>
</tr>
<tr>
<td></td>
<td>AUSTIN</td>
<td>51</td>
<td>553</td>
</tr>
<tr>
<td></td>
<td>BAYTOWN CITY</td>
<td>51</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>BEAUMONT</td>
<td>51</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td>BROWNSVILLE</td>
<td>51</td>
<td>108</td>
</tr>
<tr>
<td></td>
<td>ELY</td>
<td>51</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>CORPUS CHRISTI</td>
<td>51</td>
<td>230</td>
</tr>
<tr>
<td></td>
<td>DALLAS</td>
<td>51</td>
<td>1141</td>
</tr>
<tr>
<td></td>
<td>EL PASO</td>
<td>51</td>
<td>498</td>
</tr>
<tr>
<td></td>
<td>FORT WORTH</td>
<td>51</td>
<td>389</td>
</tr>
<tr>
<td></td>
<td>GALVESTON</td>
<td>51</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>GAVELSON</td>
<td>52</td>
<td>320</td>
</tr>
<tr>
<td></td>
<td>HOUSTON</td>
<td>51</td>
<td>1834</td>
</tr>
<tr>
<td></td>
<td>IRVING</td>
<td>51</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>KILLEEN</td>
<td>51</td>
<td>68</td>
</tr>
<tr>
<td></td>
<td>LAREDO</td>
<td>51</td>
<td>117</td>
</tr>
<tr>
<td></td>
<td>LONEVILLE</td>
<td>51</td>
<td>97</td>
</tr>
<tr>
<td></td>
<td>LUBBOCK</td>
<td>51</td>
<td>183</td>
</tr>
<tr>
<td></td>
<td>MC ALLEN</td>
<td>51</td>
<td>67</td>
</tr>
<tr>
<td></td>
<td>ODessa</td>
<td>51</td>
<td>74</td>
</tr>
<tr>
<td></td>
<td>PASadena</td>
<td>52</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>PORT ARTHUR</td>
<td>51</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>SAN ANGELO</td>
<td>51</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>SAN ANTONIO</td>
<td>51</td>
<td>884</td>
</tr>
<tr>
<td></td>
<td>TYLEN</td>
<td>51</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>WACO</td>
<td>51</td>
<td>153</td>
</tr>
<tr>
<td></td>
<td>WICHITA FALLS</td>
<td>51</td>
<td>89</td>
</tr>
<tr>
<td></td>
<td>BEAR COUNTY</td>
<td>66</td>
<td>77</td>
</tr>
<tr>
<td></td>
<td>HARRIS COUNTY</td>
<td>66</td>
<td>219</td>
</tr>
<tr>
<td></td>
<td>TARRANT COUNTY</td>
<td>66</td>
<td>118</td>
</tr>
<tr>
<td>VIRGINIA</td>
<td>ALEXANDRIA</td>
<td>52</td>
<td>132</td>
</tr>
<tr>
<td></td>
<td>CHESAPEAKE</td>
<td>52</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>HAMPTON</td>
<td>51</td>
<td>103</td>
</tr>
<tr>
<td>VERMONT</td>
<td>*51 = Central City</td>
<td>52</td>
<td>105</td>
</tr>
<tr>
<td></td>
<td>*52 = Suburban City</td>
<td>66</td>
<td>128</td>
</tr>
<tr>
<td></td>
<td>*57 = Consortium</td>
<td>67</td>
<td>118</td>
</tr>
</tbody>
</table>
## Rental Rehabilitation Allocation State Summary Report

### Fiscal Year 1987

<table>
<thead>
<tr>
<th>State</th>
<th>Metro #</th>
<th>Urban County #</th>
<th>City/County</th>
<th>State</th>
<th>City/County/State Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>1392</td>
<td>196</td>
</tr>
<tr>
<td>Alaska</td>
<td>1</td>
<td></td>
<td>1</td>
<td>130</td>
<td></td>
</tr>
<tr>
<td>Arizona</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>689</td>
<td>316</td>
</tr>
<tr>
<td>Arkansas</td>
<td>4</td>
<td></td>
<td></td>
<td>389</td>
<td>950</td>
</tr>
<tr>
<td>California</td>
<td>67</td>
<td>16</td>
<td>5,937</td>
<td>23392</td>
<td>3087</td>
</tr>
<tr>
<td>Colorado</td>
<td>8</td>
<td>1</td>
<td>100</td>
<td>1727</td>
<td></td>
</tr>
<tr>
<td>Connecticut</td>
<td>10</td>
<td></td>
<td></td>
<td>1759</td>
<td>963</td>
</tr>
<tr>
<td>Delaware</td>
<td>1</td>
<td>1</td>
<td>187</td>
<td>324</td>
<td>55</td>
</tr>
<tr>
<td>District of Columbia</td>
<td>1</td>
<td></td>
<td></td>
<td>1231</td>
<td></td>
</tr>
<tr>
<td>Florida</td>
<td>18</td>
<td>11</td>
<td>2,679</td>
<td>6848</td>
<td>1555</td>
</tr>
<tr>
<td>Georgia</td>
<td>5</td>
<td>4</td>
<td>653</td>
<td>2302</td>
<td>1761</td>
</tr>
<tr>
<td>Hawaii</td>
<td>1</td>
<td></td>
<td></td>
<td>751</td>
<td>107</td>
</tr>
<tr>
<td>Idaho</td>
<td>1</td>
<td></td>
<td></td>
<td>96</td>
<td>387</td>
</tr>
<tr>
<td>Illinois</td>
<td>14</td>
<td>6</td>
<td>1,394</td>
<td>9787</td>
<td>1877</td>
</tr>
<tr>
<td>Indiana</td>
<td>10</td>
<td>1</td>
<td>75</td>
<td>1925</td>
<td>1355</td>
</tr>
<tr>
<td>Iowa</td>
<td>8</td>
<td></td>
<td></td>
<td>801</td>
<td>822</td>
</tr>
<tr>
<td>Kansas</td>
<td>4</td>
<td>1</td>
<td>73</td>
<td>745</td>
<td>733</td>
</tr>
<tr>
<td>Kentucky</td>
<td>3</td>
<td>1</td>
<td>154</td>
<td>1010</td>
<td>1080</td>
</tr>
<tr>
<td>Louisiana</td>
<td>8</td>
<td></td>
<td>2,351</td>
<td>2621</td>
<td>945</td>
</tr>
<tr>
<td>Maine</td>
<td>1</td>
<td></td>
<td></td>
<td>165</td>
<td>165</td>
</tr>
<tr>
<td>Maryland</td>
<td>1</td>
<td>4</td>
<td>1,215</td>
<td>2938</td>
<td>498</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>20</td>
<td></td>
<td></td>
<td>4355</td>
<td>2270</td>
</tr>
<tr>
<td>Michigan</td>
<td>9</td>
<td>5</td>
<td>669</td>
<td>4380</td>
<td>2113</td>
</tr>
<tr>
<td>Minnesota</td>
<td>4</td>
<td>4</td>
<td>424</td>
<td>1671</td>
<td>901</td>
</tr>
<tr>
<td>Mississippi</td>
<td>1</td>
<td></td>
<td></td>
<td>234</td>
<td>120</td>
</tr>
<tr>
<td>State</td>
<td>Metro City #</td>
<td>Urban County #</td>
<td>City/County #</td>
<td>State Amount</td>
<td>City/County/State Total Amount</td>
</tr>
<tr>
<td>---------------</td>
<td>--------------</td>
<td>----------------</td>
<td>---------------</td>
<td>-------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Missouri</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>2 096</td>
<td>3 473</td>
</tr>
<tr>
<td>Montana</td>
<td>2</td>
<td>146</td>
<td>1</td>
<td>146</td>
<td>508</td>
</tr>
<tr>
<td>Nebraska</td>
<td>2</td>
<td>543</td>
<td>1</td>
<td>543</td>
<td>899</td>
</tr>
<tr>
<td>Nevada</td>
<td>2</td>
<td>339</td>
<td>1</td>
<td>2 620</td>
<td>711</td>
</tr>
<tr>
<td>New Hampshire</td>
<td>2</td>
<td>237</td>
<td>1</td>
<td>2 151</td>
<td>621</td>
</tr>
<tr>
<td>New Jersey</td>
<td>12</td>
<td>3</td>
<td>1</td>
<td>5 200</td>
<td>7 451</td>
</tr>
<tr>
<td>New Mexico</td>
<td>3</td>
<td>449</td>
<td>1</td>
<td>449</td>
<td>854</td>
</tr>
<tr>
<td>New York</td>
<td>18</td>
<td>24</td>
<td>9</td>
<td>8 121</td>
<td>29 081</td>
</tr>
<tr>
<td>North Carolina</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td>3 14</td>
<td>1 311</td>
</tr>
<tr>
<td>North Dakota</td>
<td>1</td>
<td>81</td>
<td></td>
<td>81</td>
<td>3 05</td>
</tr>
<tr>
<td>Ohio</td>
<td>15</td>
<td>5</td>
<td>7</td>
<td>5 316</td>
<td>8 716</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>4</td>
<td>958</td>
<td></td>
<td>958</td>
<td>1 984</td>
</tr>
<tr>
<td>Oregon</td>
<td>3</td>
<td>990</td>
<td>3</td>
<td>1 430</td>
<td>2 203</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>11</td>
<td>5</td>
<td>12</td>
<td>1 513</td>
<td>10 115</td>
</tr>
<tr>
<td>Rhode Island</td>
<td>4</td>
<td>7</td>
<td>12</td>
<td>708</td>
<td>1 200</td>
</tr>
<tr>
<td>South Carolina</td>
<td>4</td>
<td>482</td>
<td>1</td>
<td>1 49</td>
<td>1 755</td>
</tr>
<tr>
<td>South Dakota</td>
<td>1</td>
<td>83</td>
<td></td>
<td>83</td>
<td>3 05</td>
</tr>
<tr>
<td>Tennessee</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>2 007</td>
<td>3 013</td>
</tr>
<tr>
<td>Texas</td>
<td>29</td>
<td>7</td>
<td>3</td>
<td>532</td>
<td>10 825</td>
</tr>
<tr>
<td>Utah</td>
<td>3</td>
<td>487</td>
<td>1</td>
<td>1 28</td>
<td>886</td>
</tr>
<tr>
<td>Vermont</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>305</td>
</tr>
<tr>
<td>Virginia</td>
<td>10</td>
<td>1</td>
<td>2</td>
<td>855</td>
<td>3393</td>
</tr>
<tr>
<td>Washington</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>330</td>
<td>3 359</td>
</tr>
<tr>
<td>West Virginia</td>
<td>2</td>
<td>193</td>
<td></td>
<td>193</td>
<td>851</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>7</td>
<td>1</td>
<td>1</td>
<td>7 02</td>
<td>2 999</td>
</tr>
<tr>
<td>City/County/State</td>
<td>Amount</td>
<td>Total Amount</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>--------</td>
<td>-------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>State</td>
<td>786</td>
<td>51,763</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>868</td>
<td>148,237</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Virgin Islands</td>
<td>1,228</td>
<td>1,228</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US Totals</td>
<td>381</td>
<td>25,397</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[FR Doc. 87-8608 Filed 4-15-87; 8:45 am]
DEPARTMENT OF THE INTERIOR
Bureau of Indian Affairs

Turtle Mountain Band of Chippewa Indians, North Dakota; Ordinance Amending Law Relating to Liquor Licensing

April 8, 1987

This Notice is published in accordance with authority delegated by the Secretary of the Interior to the Assistant Secretary—Indian Affairs by 209 DM 8, and in accordance with the Act of August 15, 1953, 87 Stat. 586, 18 U.S.C. 1161. I certify that Resolution No. 3294-07-86, amending the Turtle Mountain Tribal Liquor Ordinance was duly adopted by the Turtle Mountain Tribal Council on July 22, 1986. The ordinance provides for a limitation on the number of liquor licenses allowed to be issued in the area of Indian country under the jurisdiction of the Turtle Mountain Band of Chippewa Indians, North Dakota and amends Ordinance No. 19 (74), which was published in the Federal Register on May 9, 1974, 39 FR 16491. The Ordinance reads as follows:

Assistant Secretary—Indian Affairs.

Resolution Number 3294-07-86 of the Turtle Mountain Band of Chippewa Indians

Whereas, the Turtle Mountain Band of Chippewa Indians, hereinafter referred to as the Tribe, is an unincorporated Band of Indians acting under a revised Constitution and By-laws approved by the Secretary of the Interior on June 16, 1959, and amendments thereto approved April 28, 1962, and April 3, 1975; and

Whereas, the Tribe presently has a limitation on the number of liquor licenses they are allowed to issue; and

Whereas, the Tribe wishes to amend that portion of the Code: now

Therefore be it resolved that section 19.0111 of the Turtle Mountain Tribal Code be amended as follows: The maximum number of each classification of licenses for on/off sales which may be issued shall be limited to ten (10) for all liquor establishments under tribal jurisdiction, with a minimum of two (2) per district.

Certification

I, the undersigned Tribal Secretary of the Turtle Mountain Band of Chippewa Indians, do hereby certify that the Tribal Council is composed of nine (9) members of whom five (5) constituting a quorum were present at a meeting duly called, convened, and held on the 22nd day of July 1986, that the foregoing resolution was adopted by an affirmative vote of four (4) in favor, with the Vice-Chairman not voting.

Joleen Peltier, Tribal Secretary.
Concurred:
Ray G. Parnsen, Vice-Chairman.

Bureau of Land Management

[UT-020-07-4322-02]
Salt Lake District; Advisory Board Meeting

AGENCY: Bureau of Land Management, Interior.

ACTION: Notice.

SUMMARY: Notice is hereby given in accordance with Public Law 82-463 that the Salt Lake District Grazing Advisory Board will meet and touring public lands on May 27 and 28, 1987. The Board will meet at 9:00 a.m. at the Salt Lake District, Bureau of Land Management office, at 2370 South 2300 West, Salt Lake City, Utah. The board will then depart for a tour of public lands in Box Elder County. The night of May 27, 1987, a business meeting will be held at 7:00 p.m. at the Rosebud BLM field camp.

The purpose of the tour and meeting will be to: (1) Review implementation efforts of the Box Elder RMP, (2) review range improvement projects, and (3) inspect important riparian management areas in Box Elder County.

The business meeting is open to the public and interested persons may make oral statements between 7:00 and 7:30 p.m., or file a written statement for the Board’s consideration. Persons wishing to make statements to the Board are requested to contact Glade Anderson at (801) 524-5348 prior to May 22, so that adequate time can be included on the agenda.

FOR FURTHER INFORMATION CONTACT:
Glade Anderson, Range Conservationist, Bureau of Land Management, Salt Lake District Office, 2370 South 2300 West, Salt Lake City, Utah 84119, (801) 524-5348.
Deane Zeller, Salt Lake District Manager.

[FR Doc. 87-8620 Filed 4-16-87; 8:45 am]
BILLING CODE 4310-DQ-M

Realty Action; Noncompetitive Sale; Elko County, NV

The following land has been examined and identified as suitable for disposal by direct sale under section 203 of the Federal Land Policy and Management Act of 1976 (90 Stat. 2750; 43 U.S.C. 1713) at no less than fair market value:

Mount Diablo Meridian
T. 36 N., R. 69 E.
Sec. 22, SW 1/4 SE 1/4 SW 1/4.

The above-described land comprising 2.5 acres, is being offered as a direct sale to Mr. and Mrs. Lawrence Olson. A direct sale is being conducted to resolve inadvertent unauthorized use and occupancy of the public lands resulting from a private survey error. A direct sale is necessary to protect the Olson’s investment in the improvements on the subject lands.

The sale is consistent with the Bureau’s planning system. The land is not needed for any resource program and is not suitable for management by the Bureau or another Federal department or agency. The proposal has been reviewed by the Elko County Planning Commission.

The patent, when issued, will contain the following reservations to the United States:

2. All oil and gas mineral deposits. A more detailed description of this reservation, which will be incorporated in the patent document, is available for review at the Elko District Office.

Publication of this Notice in the Federal Register will segregate these public lands from all forms of appropriation under the public land laws and the mining laws. The
segregative effect will end upon issuance of a patent or 270 days from the date of this Notice's publication in the Federal Register, whichever occurs first.

Detailed information concerning the sale is available for review at the Elko District Office, Bureau of Land Management. For a period of 45 days from the date of publication in the Federal Register, interested parties may submit comments to the District Manager, Bureau of Land Management, 3900 East Idaho, Elko, Nevada 89801. Any adverse comments will be reviewed by the State Director, who may sustain, vacate or modify this realty action. In the absence of any objections, this realty action will become the final determination of the Department of the Interior. The land will not be offered for sale any sooner than 60 days after the date of this notice.

Dated: April 9, 1987,
Rodney Harris,
District Manager.
[FR Doc. 87-8707 Filed 4-16-87; 8:45 am]
BILLING CODE 4510-HC-M

[NV-930-07-4212-11; N-43030]

Realty Action; Lease/Purchase for Recreation and Public Purposes, Clark County, NV

The following described public land, located approximately 9 miles northwest of the City of Las Vegas, in Clark County, Nevada has been identified and examined and will be classified as suitable for lease/purchase under the Recreation and Public Purposes Act, as amended (43 U.S.C. 869 et seq.). The lands will not be offered for lease/purchase until at least 60 days after the date of publication of this notice in the Federal Register.

Mount Diablo Mendian, Nevada
T. 19 S., R. 60 E., Sec. 17, N4\N4\N4N4.
This parcel of land contains approximately 5.00 acres.

The Animal Rescue Foundation intends to use the land for a non-profit animal adoption center. The lease and/or patent, when issued, will be subject to the provisions of Recreation and Public Purposes Act and applicable regulations of the Secretary of the Interior, and will contain the following reservations to the United States:


2. All minerals shall be reserved to the United States, together with the right to prospect for, mine and remove such deposits from the same under applicable law and such regulations as the Secretary of the Interior may prescribe. and will be subject to:

1. An easement for streets, roads and public utilities in accordance with the transportation plan for Clark County/ the City of Las Vegas.

The land is not required for any federal purpose. The lease/purchase is consistent with the Bureau's planning for this area.

Detailed information concerning this action is available for review at the office of the Bureau of Land Management, Las Vegas District, 4765 W. Vegas Drive, Las Vegas, Nevada.

Upon publication of this notice in the Federal Register, the above described land will be segregated from all forms of appropriation under the public lands laws, including the general mining laws, except for recreation and public purposes and leasing under the mineral leasing laws.

For a period of 45 days from the date of publication of this notice in the Federal Register, interested parties may submit comments to the District Manager, Las Vegas District, P.O. Box 26569, Las Vegas, Nevada 89126. Any adverse comments will be reviewed by the State Director. In the absence of any adverse comments, the classification of the lands described in this Notice will become effective 60 days from the date of publication in the Federal Register.

Dated: April 9, 1987
Ben F. Collins,
District Manager, Las Vegas, NV.
[FR Doc. 87-8707 Filed 4-16-87; 8:45 am]
BILLING CODE 4510-HC-M

Fish and Wildlife Service
Receipt of Applications for Permits

The following applicants have applied for permits to conduct certain activities with endangered species. This notice is provided pursuant to Section 10(c) of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531, et seq.):

PRT-860379
Applicant: Jimmie C. Rosenbruch, Santa Clara, UT.

The applicant requests a permit to import a trophy from a bontebok (Damaliscus dorcas dorcas) which was a member of a captive herd maintained by Theo Erasmus, Geluk, Kroonstad, Orange Free State Republic of South Africa. The herd is maintained for the purpose of sport hunting. The applicant contends that permission to import this trophy will enhance the likelihood of the continued maintenance of this herd and thereby enhance the survival of the species.

PRT-71655
Applicant: Raymond Nicholas, Columbia, CA.

The applicant requests a permit to import a trophy from a bontebok (Damaliscus dorcas dorcas) which was a member of a captive herd maintained by Theo Erasmus, Geluk, Kroonstad, Orange Free State Republic of South Africa. The herd is maintained for the purpose of sport hunting. The applicant contends that permission to import this trophy will enhance the likelihood of the continued maintenance of this herd and thereby enhance the survival of the species.

PRT-716554
Applicant: Susan R. Walker, Ft Lauderdale, FL.

The applicant requests a permit to import a trophy from a bontebok (Damaliscus dorcas dorcas) which was a member of a captive herd maintained by B. J. DeKlerk, Bedford, Republic of South Africa. The herd is maintained for the purpose of sport hunting. The applicant contends that permission to import this trophy will enhance the likelihood of the continued maintenance of this herd and thereby enhance the survival of the species.

PRT-717031
Applicant: Rare Feline Breeding Center, Center Hill, FL.

The applicant requests a permit to export one male clouded leopard (Neofelis nebulosa) captive born at the applicant's facility Center Hill, Florida to Parco Faunitico La Tabiera, Novara, Italy for the purpose of propagation and exhibition.

PRT-717028
Applicant: Yerkes Regional Primate, Research Center.

The applicant requests a permit to export 5 ml serum samples from three gorillas (Gorilla gorilla) and three orangutans (Pongo pygamaeus). These samples will be sent to Privatdozentin Arzt fur Laboratoriumsmedizin, Berliner Promenade 17 Saar Center, West Germany.

Documents and other information submitted with these applications are available to the public during normal business hours (7:45 am to 4:15 pm) Room 811, 1000 North Glebe Road, Arlington, Virginia 22201, or by writing to the Director U.S. Fish and Wildlife Service of the above address.

Interested persons may comment on any of these applications within 30 days of the date of this publication by submitting written views, arguments, or
National Park Service

Intention To Negotiate Concession Contract

Pursuant to the provisions of section 5 of the Act of October 9, 1965 (79 Stat. 969; to U.S.C. 20), public notice is hereby given that ninety (90) days after the date of publication of this notice, the Department of the Interior, through the Director of the National Park Service, proposes to negotiate a concession contract with International Leisure Hosts, Ltd., authorizing it to continue to provide lodging, food, retail merchandising, and gasoline facilities and services for the public at John D. Rockefeller Memorial Parkway, Wyoming for a period of up to twenty (20) years from January 1, 1988, through December 31, 2007.

This proposed contract requires a construction and improvement program. The construction and improvement program required was previously addressed in the Environmental Review of Assessment of Alternatives, approved November 8, 1979, that was prepared in conjunction with the Development Concept Plan for John D. Rockefeller Jr. Memorial Parkway.

The foregoing-concessioner has performed its obligations to the satisfaction of the Secretary under an existing contract which expires by limitation of time on December 31, 1989, and therefore, pursuant to the policies of the Act October 9, 1965, as cited above, is administratively granted preference in the renewal of the contract and in the negotiation of a new contract as defined in 36 CFR 21.5.

The Secretary will consider and evaluate all proposals received as a result of this notice, any proposal, including that the existing concessioner, must be postmarked or hand delivered on or before the ninetieth (90th) day following publication of this notice to be considered and evaluated.

Interested parties should contact the Regional Director, Rocky Mountain Region, 655 Parfet Street, P.O. Box 25287 Denver, Colorado, 80225, for information as to the requirements of the proposed contract.


Lorraine Mintzmyer,
Regional Director, Rocky Mountain Region.

[FR Doc. 87-8756 Filed 4-16-87; 8:45 am] BILLING CODE 4310-70-M

INTERSTATE COMMERCE COMMISSION

[Finance Docket No. 31011]

Duval Transportation of the Carolinas, Inc., Acquisition and Operation of a Rail Line

Duval Transportation of the Carolinas, Inc., a noncarrier, has filed a notice of exemption to acquire and operate CSX Transportation, Inc.'s lines between: (1) Mullins, SC (milepost AL 326) and Whiteville, NC (milepost AC 289.0), a distance of 37 miles in Marion and Horry Counties, SC and Columbus County, NC; and (2) Chadbourne NC (milepost ACH 297.2) and Conway, SC (milepost ACH 336.1), a distance of 38.9 miles in Columbus County, NC and Horry County, SC. Any comments must be filed with the Commission and served on: Charles A. Hostetler, Attorney at Law, Hostetler & McNeill, 109 Campus Headster, Raeaford, NC 28376, (919) 875-2142.

The notice is filed under 49 CFR 1150.31. If the notice contains false or misleading information, the exemption is void ab initio. Petitions to revoke the exemption under 49 U.S.C. 10505(d) may be filed at any time. The filing of a petition to revoke will not automatically stay the transaction.


By the Commission, Jane F. Mackall, Chairman; Vice Chairman Lamboley, Commissioners Sterrett, Andre, and Simmons.

Noreta R. McGee,
Secretary.

[FR Doc. 87-8756 Filed 4-16-87; 8:45 am] BILLING CODE 7535-01-M

[Finance Docket No. 30939]

Acqulisation of Cedar Valley Railroad Co. by John E. Haley; Exemption

AGENCY: The Interstate Commerce Commission.

ACTION: Notice of exemption.

SUMMARY: The Interstate Commerce Commission exempts from the requirements of 49 U.S.C. 11343 the acquisition of control of Cedar Valley Railroad Company by John E. Haley who already controls the Chicago, Central & Pacific Railroad Company, subject to employee protective conditions.

DATES: This exemption will be effective on May 18, 1987 Petitions to stay must be filed by April 27, 1987 and petitions for reconsideration must be filed by May 7, 1987.

ADDRESSES: Send pleadings referring to Finance Docket No. 30939 to: (1) Office of the Secretary, Case Control Branch, Interstate Commerce Commission, Washington, DC 20423

(2) Petitioner's Representative: Deborah A. Phillips, Suite 800, 1350 New York Avenue, NW., Washington, DC 20005

FOR FURTHER INFORMATION CONTACT: Joseph H. Detmam, (202) 275-7245.

SUPPLEMENTARY INFORMATION: Additional information is contained in the Commission's decision. To purchase a copy of the full decision write to T.S. InfoSystems, Inc., Room 2229, Interstate Commerce Commission Building, Washington, DC 20423, or call 289-4357 (DC Metropolitan area).


By the Commission, Chairman Gradison, Vice Chairman Lamboley, Commissioners Sterrett, Andre, and Simmons.

Noreta R. McGee,
Secretary.

[FR Doc. 87-8756 Filed 4-16-87; 8:45 am] BILLING CODE 7535-01-M

DEPARTMENT OF JUSTICE

Consent Decree Pursuant to Clean Air Act; B.F Goodrich Co.

In accordance with Departmental Policy, 28 CFR 50.7 notice is hereby given that on April 7, 1987 a proposed consent decree in United States v. The B.F. Goodrich Co., Civil Action No. 83-1337 was lodged with the United States District Court for the Middle District of Louisiana. The proposed consent decree contains the discharge of vinyl chloride to the atmosphere in excess of applicable emissions standards from a polyvinyl chloride plant in Plaquemine, Louisiana. The proposed consent decree requires the defendant to pay a civil penalty of $395,000 and install equipment to ensure compliance with the Clean Air Act and vinyl chloride regulations.

1 The Railway Labor Executives' Association (RLEA) filed an unsupported request for labor protection claiming that this transaction is subject to the mandatory labor protection provisions of 49 U.S.C. 11347. Since this transaction involves an exemption from 49 U.S.C. 10801, RLEA's request is rejected. See Class Exemption—Acq. & Oper. of R. Lines Under 49 U.S.C. 10801. 1 I.C.C.2d 810 (1985).
The Department of Justice will receive for a period of thirty (30) days from the date of this publication comments relating to the proposed consent decree. Comments should be addressed to the Assistant Attorney General, Land and Natural Resources Division, Department of Justice, Washington, D.C., 20530, and should refer to United States v. The B.F. Goodrich Co., D.J. Ref. No. 87-5-2-1-681.

The proposed consent decree may be examined at the Office of the United States Attorney, Middle District of Louisiana, Federal Building, 352 Florida Street, Baton Rouge, Louisiana, 70801, and at the Region VI Office of the Environmental Protection Agency, 1201 Elm Street, Dallas Texas, 75270. Copies of the consent decree may be examined at the Environmental Enforcement Section, Land and Natural Resources Division of the Department of Justice, Room 1515, Ninth Street and Pennsylvania Avenue, N.W., Washington, DC 20530. A copy of the proposed consent decree may be obtained in person or by mail from the Environmental Enforcement Section, Land and Natural Resources Division of the Department of Justice. In requesting a copy, please enclose a check in the amount of $1.30 (10 cents per page reproduction cost) payable to the Treasurer of the United States.

F. Henry Habicht II, Assistant Attorney General, Land and Natural Resources Division.

[FR Doc. 87-8684 Filed 4-18-87; 8:45 am] BILLING CODE 4410-01-M

Lodging of Consent Decree Pursuant to the Clean Air Act; Darshan’s Gas, Inc., et al.

In accordance with Departmental policy, 28 CFR 50.7 notice is hereby given that a proposed consent decree in United States v. Darshan’s Gas, Inc., et al., Civil Action No. 86-C-252 was lodged with the United States District Court for the Eastern District of Wisconsin. The Consent Decree resolves certain claims of the United States against the defendants under the Clean Air Act, 42 U.S.C. 7401, et seq.

The proposed consent decree requires defendants to pay a civil penalty of $7,500 and to implement a fuel sampling and analysis program at each retail service station outlet owned, leased, operated, controlled or supervised by defendants and at each retail service station to which defendants deliver gasoline. As part of this program, defendants are required to collect samples from all unleaded and premium unleaded fuel pumps at such stations and to analyze the lead content of such samples.

The proposed consent decree also requires defendants to conduct an inspection of each retail service station outlet owned, leased, operated, controlled or supervised by defendants to determine whether such outlets are in compliance with federal requirements pertaining to the size of nozzle spouts on unleaded fuel pumps, labeling of unleaded fuel pumps, and the posting of warning signs indicating that federal law prohibits the introduction of leaded gasoline into motor vehicles labeled "unleaded gasoline only."

The Department of Justice will receive comments relating to the proposed consent decree for a thirty (30) day period from the date of this publication. Comments should be addressed to the Assistant Attorney General of the Land and Natural Resources Division, Department of Justice, Washington, DC 20530, and should refer to United States v. Darshan’s Gas, Inc., et al., with the applicable D.J. reference No. 80-5-2-1-808 (E.D. Wisconsin).

The proposed consent decree may be examined at the office of the United States Attorney, for the Eastern District of Wisconsin, 517 East Wisconsin Avenue, Milwaukee, Wisconsin 53202, and at the Office of Regional Counsel, United States Environmental Protection Agency, Region V, 230 South Dearborn Street, Chicago, Illinois 60604. Copies of the consent decree and attachments may be examined at the Environmental Enforcement Section, Land and Natural Resources Division of the Department of Justice, Room 1515, Ninth Street and Pennsylvania Avenue, N.W., Washington, DC 20530. A copy of the proposed consent decree may be obtained in person or by mail from the Environmental Enforcement Section, Land and Natural Resources Division of the Department of Justice.

F. Henry Habicht II, Assistant Attorney General, Land and Natural Resources Division.

[FR Doc. 87-8685 Filed 4-18-87; 8:45 am] BILLING CODE 4410-01-M

Lodging of Stipulation for Dismissal Pursuant to Clean Air Act; Geppert Bros. et al.

In accordance with Departmental policy, 28 CFR 50.7 notice is hereby given that on April 8, 1987 a proposed Stipulation for Dismissal in United States v. Geppert Bros., et al., Civil Action No. 90-5-2-1-774A was lodged with the United States District Court for the Eastern District of Pennsylvania. The proposed Stipulation for Dismissal imposes a civil penalty totaling seven thousand five hundred ($7,500) dollars.

The Department of Justice will receive for a period of thirty (30) days from the date of this publication comments relating to the proposed Stipulation. Comments should be addressed to the Assistant Attorney General of the Land and Natural Resources Division, Department of Justice, Washington, DC 20530, and should refer to United States v. Geppert Bros., et al., D. J. Ref. # 90-5-2-1-774A.

The proposed Stipulation may be examined at the Office of the United States Attorney, 601 Market Street, Philadelphia, PA 19107, and at the Region III Office of the Environmental Protection Agency, 841 Chestnut Street, Philadelphia, PA 19107, and at the Environmental Enforcement Section, Land and Natural Resources Division of the Department of Justice, Rm. 1515, Ninth Street and Pennsylvania Avenue N.W., Washington, DC 20530. A copy of the Stipulation may be obtained in person or by mail from the Environmental Enforcement Section, Land and Natural Resources Division of the Department of Justice.

F. Henry Habicht II, Assistant Attorney General, Land and Natural Resources Division.

[FR Doc. 87-8686 Filed 4-18-87; 8:45 am] BILLING CODE 4410-01-M

Lodging of Consent Decree Pursuant to Clean Water Act; New Holland Borough et al.

In accordance with Departmental Policy, 28 CFR 50.7 notice is hereby given that on March 27, 1987 a proposed Consent Decree in United States v. New Holland Borough, et al., was lodged with the United States District Court for the Eastern District of Pennsylvania. The proposed Consent Decree concerns violations by the defendant for failure to meet limitations in its NPDES permit and for failure to monitor ammonia and phosphorus discharges. The proposed decree imposes a civil penalty of $30,000 and requires the defendant to provide an expedited schedule to renovate and
reconstruct the New Holland Borough Authority’s Waste Water Treatment facility.

The Department of Justice will receive for a period of thirty (30) days from the date of this publication comments relating to the proposed consent decree. Comments should be addressed to the Assistant Attorney General of the Land and Natural Resources Division, Department of Justice, Washington, DC 20530, and should refer to United States v. New Holland Borough, et al. D.J. Ref. 90-5-1-1-2638.

The proposed Consent Decree may be examined at the office of the United States Attorney, 601 Market Street, Philadelphia, Pennsylvania 19107 at the Region III Office of the Environmental Protection Agency, 841 Chestnut Street, Philadelphia, Pennsylvania 19107 and at the Environmental Enforcement Section, Land and Natural Resources Division, Department of Justice, Rm. 1515, Ninth Street and Pennsylvania Avenue, N.W., Washington, DC 20530. A copy of the proposed Consent Decree may be obtained in person or by mail from the Environmental Enforcement Section, Land and Natural Resources Division of the Department of Justice. In requesting a copy, please enclose $2.10 (10 cents per page reproduction cost) payable to the Treasurer of the United States. F. Henry Habicht II, Assistant Attorney General, Land and Natural Resources Division.

BILLING CODE 4410-01-M

 Lodging of Consent Decree Pursuant to Clean Air Act; Utility Trailer Manufacturing Co.

In accordance with Departmental policy, 28 CFR 50.7 notice is hereby given that on March 24, 1987 a proposed Consent Decree in United States v. Utility Trailer Manufacturing Co., CV 86-4284 AWI (Ks) was lodged with the United States District Court for the Central District of California. The proposed Consent Decree concerns the prevention of the release of volatile organic compounds in violation of the Clean Air Act and the limits set forth in Local Rule 1107 of the South Coast Air Quality Management Division. Rule 1107 is part of the California State Implementation Plan that has been approved by the United States Environmental Protection Agency. The proposed Consent Decree requires Utility Trailer to maintain compliance with Rule 1107 and to pay a civil penalty of $20,000.

The Department of Justice will receive for a period of thirty (30) days from the date of this publication comments relating to the proposed consent decree. Comments should be addressed to the Assistant Attorney General of the Land and Natural Resources Division, Department of Justice, Washington, DC 20530, and should refer to Utility Trailer Manufacturing Co. D.J. Ref. 90-5-2-1-964.

The proposed Consent Decree may be examined at the office of the United States Attorney, Central District of California, 312 N. Spring Street, Los Angeles, California 90012, and at the Region 9 Office of Environmental Protection Agency, 215 Fremont Street, San Francisco, California 90415. Copies of the Consent Decree may be examined at the Environmental Enforcement Section, Land and Natural Resources Division of the Department of Justice, Room 1517 Ninth Street and Pennsylvania Avenue NW., Washington, DC 20530. A copy of the proposed Consent Decree may be obtained in person or by mail from the Environmental Enforcement Section, Land and Natural Resources Division of the Department of Justice. In requesting a copy please refer to the referenced case and enclose a check in the amount of $1.30 (10 cents per page reproduction cost) made payable to the Treasurer of the United States. F. Henry Habicht II, Assistant Attorney General, Land and Natural Resources Division.

BILLING CODE 4410-01-M

 Drug Enforcement Administration

William D. Romers, D.D.S., Revocation of Registration

On January 30, 1987 the Deputy Assistant Administrator, Office of Diversion Control, Drug Enforcement Administration (DEA) issued an Order to Show Cause to William D. Romers, D.D.S., 208 Mayer Building, 129 W. Park Street, Box 568, Butte, Montana 59703, proposing to revoke his DEA Certificate of Registration AR1233030 as a practitioner in Schedules II, III, IV and V.The statutory predicate for the Order to Show Cause was that Dr. Romers relinquished his license to practice dentistry in the State of Montana on June 1, 1981, and has not been authorized to practice dentistry or handle controlled substances in Montana since that time. The Order to Show Cause was sent to Dr. Romers registered mail, return receipt requested. DEA received the receipt which indicated that the Order to Show Cause was received on February 3, 1987 at Dr. Romers’ registered address. More than thirty days have elapsed since the Order to Show Cause was received, and the Drug Enforcement Administration has received no response. Pursuant to 21 CFR 1301.54(a) and (d). Dr. Romers is deemed to have waived his opportunity for a hearing. Accordingly, the Administrator now enters his final order in this matter without a hearing and based upon the investigative file. 21 CFR 1301.57.

The administrator finds that on June 1, 1981, Dr. Romers relinquished his license to practice dentistry to the Board of Dentists, Department of Professional and Occupational Licensing, State of Montana. Dr. Romers’ License was relinquished pursuant to a stipulation entered into with the Board of Dentists following the issuance of a Notice of Suspension or Revocation by the Board. Dr. Romers remains unlicensed, and therefore unauthorized to handle controlled substances in the State of Montana.

The Administrator has consistently held that when a DEA registrant is not authorized to handle controlled substances in the State in which he practices, DEA is without lawful authority to maintain his registration. See: Avner Kaufman, M.D., Docket No. 85-8, 50 FR 34208 (1985); Kenneth K. Birchard, M.D., 48 FR 33778 (1983); and Thomas E. Woodson, D.O., Docket No. 81-4, 47 FR 1353 (1982). Since Dr. Romers is not authorized to handle controlled substances in Montana, the Administrator cannot allow him to remain registered in that State.

Accordingly, the Administrator of the Drug Enforcement Administration, pursuant to the authority vested in him by 21 U.S.C. 823 and 824 and 28 CFR 0.100(b) hereby orders that DEA Certificate of Registration AR1233030 previously issued to William D. Romers, D.D.S. be, and it hereby is revoked effective May 18, 1987. Any outstanding applications for renewal of such registration are hereby denied.

Dated: April 13, 1987

John C. Lawn, Administrator

BILLING CODE 4410-08-M
DEPARTMENT OF LABOR
Employment and Training Administration

Determinations Regarding Eligibility To Apply for Worker Adjustment Assistance; American Motors Corp. et al.

In accordance with section 223 of the Trade Act of 1974 (19 U.S.C. 2273) the Department of Labor herein presents summaries of determinations regarding eligibility to apply for adjustment assistance issued during the period March 23–March 27, 1987 and March 30–April 3, 1987.

In order for an affirmative determination to be made and a certification of eligibility to apply for adjustment assistance to be issued, each of the group eligibility requirements of section 222 of the Act must be met.

(1) That a significant number or proportion of the workers in the workers’ firm, or an appropriate subdivision thereof, have become totally or partially separated.

(2) That sales or production, or both, of the firm or subdivision have decreased absolutely, and

(3) That increases of imports of articles like or directly competitive with articles produced by the firm or appropriate subdivision have contributed importantly to the separations, or threat thereof, and to the absolute decline in sales or production.

Negative Determinations

In each of the following cases the investigation revealed that criterion (3) has not been met for the reasons specified.

TA-W-19,109; Garlin, Inc., Lynchburg, VA

The workers’ firm does not produce an article as required for certification under section 222 of the Trade Act of 1974.

TA-W-19,086; Cadet Manufacturing Co., Baltimore, MD

The investigation revealed that criterion (1) has not been met. Employment did not decline significantly during the relevant period.

TA-W-19,127; Livingston Manufacturing, Inc., Livingston, AL

Sales or production did not decline during the relevant period as required for certification.

TA-W-19,014; Milprint, Inc., Film Dept., Milwaukee, WI

TA-W-19,030; Optimized Gas Systems, Inc., Tulsa, OK

TA-W-19,094; Cotton Petroleum Corp., Tulsa, OK

TA-W-19,066; AT&T Information Systems Service Center, Kent, WA

TA-W-19,092; Xtek, Inc., Cincinnati, OH

In the following cases the investigation revealed that criterion (3) has not been met for the reasons specified.

TA-W-19,122; Pocer Industries, Inc., Washington, MO

The investigation revealed that criterion (1) has not been met. Employment did not decline significantly during the relevant period.

TA-W-19,217; Stauffer Oil and Gas, Inc., Denver, CO

The workers’ firm does not produce an article as required for certification under section 222 of the Trade Act of 1974.

TA-W-18,678; Boss Enterprises Production Co., Fort Worth, TX

Production declines at the subject firm resulted from a transfer of production to other domestic facilities.

TA-W-19,104; Lakeview Manufacturing Co., Lakeview, OH

U.S. imports of linked ribbons declined absolutely and relative to domestic shipments in 1986 and 1988 compared to the preceding year.

TA-W-19,304; Kaiser Coal Corp., Sunnyside, UT

U.S. imports of metallurgical coal are negligible.

TA-W-19,341; Geosource, Inc., Houston, TX

U.S. imports of geophysical instruments declined absolutely and relative to domestic shipments in 1986 compared to 1984 and in the first nine months of 1986 when compared to the same period in 1985.

The workers’ firm does not produce an article as required for certification under section 222 of the Trade Act of 1974.

TA-W-19,171; Consolidation Coal Co., Loveridge Mine, Fairview, WV

U.S. imports of coal are negligible.

TA-W-19,967; Pennzoil Products Co., Charleston, WV

U.S. imports of gasoline and lubricants declined absolutely and relative to domestic shipment in the first nine months of 1986 compared to the same period of 1985.

TA-W-19,968; Pennzoil Exploration and Production Co., Parkersburg, WV

U.S. imports of gasoline and lubricants declined absolutely and relative to domestic shipments in the first nine months of 1986 compared to the same period of 1985.

TA-W-19,213; Milwaukee Valve Co., Milwaukee, WI

Sales of valves increased in 1986 compared with 1985.

TA-W-18,992; E.K. Birdwell Cleaning Aids, Inc., Keene, TX

Sales of cleaning supplies increased in 1986 compared to 1985.

TA-W-19,336; B & B Logging, Laredo, TX

The workers’ firm does not produce an article as required for certification under section 222 of the Trade Act of 1974.

TA-W-19,337; B.J. Titan, Roosevelt, UT

The workers’ firm does not produce an article as required for certification under section 222 of the Trade Act of 1974.

TA-W-19,348; Nordrill, Inc., Beaumont, TX

The workers’ firm does not produce an article as required for certification under section 222 of the Trade Act of 1974.

TA-W-19,349; Pengo Industries, Inc., Pengo Wireline Div., Odessa, TX

The workers’ firm does not produce an article as required for certification under section 222 of the Trade Act of 1974.

TA-W-19,350; Quail Well Service, Inc., Abilene, TX

The workers’ firm does not produce an article as required for certification under section 222 of the Trade Act of 1974.

TA-W-19,351; R-J Drilling, Sebree, Kentucky

The workers’ firm does not produce an article as required for certification under section 222 of the Trade Act of 1974.
The workers' firm does not produce an article as required for certification under section 222 of the Trade Act of 1974.

The investigation revealed that criterion (1) has not been met. Sales or production did not decline during the relevant period as required for certification.

Increased imports did not contribute importantly to worker separations at the firm.

The investigation revealed that criterion (2) has not been met. Sales or production did not decline during the relevant period as required for certification.

Affirmative Determinations

A certification was issued covering all workers of the firm separated on or after September 1, 1986.

A certification was issued covering all workers of the firm separated on or after March 28, 1986.

A certification was issued covering all workers of the firm separated on or after December 6, 1985 and before June 8, 1986.

A certification was issued covering all workers of the firm separated on or after March 3, 1986.

A certification was issued covering all workers of the firm separated on or after January 19, 1986.

A certification was issued covering all workers of the firm separated on or after February 2, 1985.

A certification was issued covering all workers of the firm separated on or after February 24, 1986.

Separations at the subject firm were due to a domestic transfer of operations.
TA-W-19,006; Harnischfeger Corp.,
Milwaukee Manufacturing, West
Milwaukee, WI and Oak Creek, WI
A certification was issued covering all workers of the firm separated on or after January 8, 1986.
TA-W-19,173; Hatter Apparel Co.,
Duncan Manufacturing, Duncan, OK
A certification was issued covering all workers of the firm separated on or after February 5, 1986.
TA-W-19,091; Sprague Electric Co.,
Visalia, CA
A certification was issued covering all workers of the firm separated on or after January 19, 1986 and before February 28, 1987
TA-W-18,985; LTV Steel Co., Los Angeles Sales Office, Orange, CA
A certification was issued covering all workers of the firm separated on or after January 8, 1986.
TA-W-17,674; Beaumont Mill Div. of Spartan Industries, Spartanburg, SC
A certification was issued covering all workers of the firm separated on or after July 7, 1985.
TA-W-19,033; Marc Dress, Hazleton, PA
A certification was issued covering all workers of the firm separated on or after January 14, 1986.
TA-W-19,078; Brodock-American Corp., Wilkes-Barre, PA
A certification was issued covering all workers of the firm separated on or after January 12, 1986.
TA-W-19,039; Farrah Manufacturing Co., El Paso, TX
A certification was issued covering all workers of the firm separated on or after December 11, 1985.
TA-W-18,858; Harvey Industries, Inc., Athens, TX
A certification was issued covering all workers of the firm separated on or after September 1, 1986.
TA-W-19,080; General Electric Co.,
Power Electronic Semiconductor Div., Syracuse, NY
A certification was issued covering all workers of the firm separated on or after January 14, 1986.
TA-W-19,099; Utica Duxbak, Inc., Utica, NY
A certification was issued covering all workers of the firm separated on or after January 8, 1986.
TA-W-19,017; Fuel Resources Development Co., Denver, CO
A certification was issued covering all workers of the firm separated on or after January 8, 1986.
TA-W-19,017A; Fuel Resources Development Co., Havre, MT
A certification was issued covering all workers of the firm separated on or after January 8, 1986.
TA-W-19,017B; Fuel Resources Development Co., Grand Junction, CO
A certification was issued covering all workers of the firm separated on or after January 8, 1986.
TA-W-19,017C; Fuel Resources Development Co., Rangely, CO
A certification was issued covering all workers of the firm separated on or after January 8, 1986.
TA-W-19,020; Lone Star Industries,
New Orleans, LA
A certification was issued covering all workers of the firm separated on or after January 13, 1986 and before March 27, 1987
TA-W-19,011; Teledyne Wisconsin Motor, West Allis, WI
A certification was issued covering all workers of the firm separated on or after January 9, 1988.
TA-W-19,252; Emhart Corp., Hartford Div., Emhart Glass Machinery Group, Obetz, OH
A certification was issued covering all workers of the firm separated on or after February 12, 1986.
TA-W-19,025; Regal Ware, Inc., Kewaskum, WI
A certification was issued covering all workers of the firm separated on or after January 12, 1986.
TA-W-19,244; Harloc Products Corp., West Haven, CT
A certification was issued covering all workers of the firm separated on or after February 19, 1986.
TA-W-19,253; Forest Hills Apparel, A.K.A. La-Reine, Inc., Forest City, PA
A certification was issued covering all workers of the firm separated on or after March 12, 1986.
TA-W-19,077; Terex Corp., Hudson, OH
A certification was issued covering all workers of the firm separated on or after February 2, 1986.
TA-W-19,043; Genesco, Inc., Headquarters, Nashville, TN
A certification was issued covering all workers of the firm separated on or after February 2, 1987
TA-W-19,044; Genesco, J&M Plant, Nashville, TN
A certification was issued covering all workers of the firm separated on or after February 2, 1987
TA-W-19,045; Genesco, Inc., Danville Plant Plant, Danville, KY
A certification was issued covering all workers of the firm separated on or after February 2, 1987
TA-W-19,046; Genesco, Inc., Fulton Plant, Fulton, MS
A certification was issued covering all workers of the firm separated on or after February 2, 1987
TA-W-19,047; Genesco, Inc., Juka Plant, Juka, MS
A certification was issued covering all workers of the firm separated on or after February 2, 1987
TA-W-19,048; Genesco, Inc., Waynesboro Plant, Waynesboro, TN
A certification was issued covering all workers of the firm separated on or after February 2, 1987
TA-W-19,049; Genesco, Inc., Hohenwald Plant, Hohenwald, TN
A certification was issued covering all workers of the firm separated on or after February 2, 1987
TA-W-19,050; Genesco, Inc., Fayetteville Terminal, Fayetteville, TN
A certification was issued covering all workers of the firm separated on or after February 2, 1987
TA-W-19,051; Genesco, Inc., 63rd Avenue Warehouse, Nashville, TN
A certification was issued covering all workers of the firm separated on or after February 2, 1987
TA-W-19,052; Genesco, Inc., Volunteer Leather Co., Milan, TN
A certification was issued covering all workers of the firm separated on or after February 2, 1987
TA-W-19,053; Genesco, Inc., Whitehall Leather Company, Whitehall, MI
A certification was issued covering all workers of the firm separated on or after February 2, 1987

I hereby certify that the aforementioned determinations were issued during the period March 23, 1987—March 27, 1987 and March 30, 1987—April 3, 1987. Copies of these determinations are available for inspection in Room 6434, U.S. Department of Labor 801 D Street, NW, Washington, DC 20213 during normal business hours or will be mailed to persons who write to the above address.
Findings in the investigation show that the increased import criterion of the Group Eligibility Requirements of the Trade Act was not met for: producing commercial air conditioners. U.S. imports of unitary air conditioners were insignificant relative to domestic shipments in 1985. A survey of Carrier's customers of commercial air conditioners revealed that the respondents did not purchase imports in 1984, 1985 or in the first nine months of 1986.

The respondents to the survey represented a substantial portion of the sales decline of commercial air conditioners at Syracuse in the first nine months of 1986 compared to the same period in 1985. The Syracuse plant experienced an increase in sales in 1985 compared to 1984.

Conclusion

After review of the application and investigative findings, I conclude that there has been no error or misinterpretation of the law or of the facts which would justify reconsideration of the Department of Labor's prior decision. Accordingly, the application is denied:

Signed at Washington, D.C., this 8th day of April, 1987

Barbara Ann Farmer,
Acting Director, Office of Program Management, U.S.

[FR Doc. 87-8664 Filed 4-16-87; 8:45 am]
BILLING CODE 4510-30-M

[TA-W-18,259]

Dover Elevator Systems, Inc.,
Cincinnati, OH; Negative Determination Regarding Application for Reconsideration

By an application dated February 25, 1987, the International Brotherhood of Electrical Workers (IBEW) requested administrative reconsideration of the Department's negative determination on the subject petition for trade adjustment assistance for workers at Dover Elevator Systems, Inc., Cincinnati, Ohio. The denial notice was signed on February 9, 1987 and published in the Federal Register on March 2, 1987 (52 FR 6238).

Pursuant to 29 CFR 90.18(c) reconsideration may be granted under the following circumstances:

1) If, in the opinion of the Certifying Officer, a misinterpretation of facts not previously considered: or

2) If, in the opinion of the Certifying Officer, a misinterpretation of facts not previously considered: or

3) If, in the opinion of the Certifying Officer, a misinterpretation of facts not previously considered: or

4) If, in the opinion of the Certifying Officer, a misinterpretation of facts not previously considered: or

5) If, in the opinion of the Certifying Officer, a misinterpretation of facts not previously considered: or

These imported purchases of motors and generators which are incorporated in the production of traction elevators and components, parts (motors and generators) are not like or directly competitive with finished elevators and components, parts. Similarly, motors and generators which are incorporated in the finished article cannot be considered like or directly competitive with elevators.

A Departmental survey for the major share of unsuccessful bids by Dover Elevator Systems for geared elevators revealed that the overwhelming majority of the subject contracts were awarded to domestic firms and involved domestic production. One of Dover's largest customers indicated that their imported purchased components were very small. Another customer reported that geared elevators are only produced domestically and any imported parts would be very small.

Industry sources indicate that the overall domestic market for traction elevators decreased by nearly a third in 1986 due mainly to (1) excess high rise office capacity in large cities; (2) new tax laws which went into effect in 1987 which virtually eliminate tax write offs for business losses and (3) the depressed market for new office buildings.
Enduro Stainless, Inc., Amended Certification Regarding Eligibility To Apply for Worker Adjustment Assistance


In accordance with section 223 of the Trade Act of 1974, the Department of Labor issued a certification of eligibility to apply for worker adjustment assistance on January 21, 1987 applicable to all workers of Enduro Stainless, Inc., Massillon, Ohio. The certification notice was published in the Federal Register on February 19, 1987 (52 FR 5213).

Based on new information furnished to the Department the certification notice is amended to include all workers in sales, customer service and other support services for Enduro Stainless, Inc., in Pennsylvania, Georgia, Alabama, New Jersey, North Carolina, Illinois and California. Since the plant closed in January, 1986 and all workers at the plant and in the field have been laid off a termination date of April 15, 1987 is hereby set.

The intent of the certification is to cover all workers of Enduro Stainless, Inc., in Ohio, Pennsylvania, Georgia, Alabama, New Jersey, North Carolina, Illinois and California. The amended notice applicable to TA-W-18,341 is hereby issued as follows:

All workers of Enduro Stainless, Incorporated, Massillon, Ohio, and all support workers (sales, customer service and management) in Philadelphia, Pennsylvania; Narbeth, Pennsylvania; Harmony, Pennsylvania; Bensalem, Pennsylvania; Wynnewood, Pennsylvania; Pittsburgh, Pennsylvania; Merion, Pennsylvania; Wyndmoor, Pennsylvania; Atlanta, Georgia; Birmingham, Alabama; Freehold, New Jersey; Charlotte, North Carolina; Glen Ellyn, Illinois, Elk Grove Village, Illinois and Laguna Hills, California who became totally or partially separated from employment on or after September 25, 1985 and before April 15, 1987 are eligible to apply for adjustment assistance under Section 223 of the Trade Act of 1974.

For purposes of administering the 210 day period to file a bona fide, timely application for training in order to qualify for additional weeks of TRA and to qualify for other reemployment services related to the certification date, the date of issue of this amended certification shall apply to the workers added herein.

Signed at Washington, DC, this 8th day of April 1987.

Carolyn M. Golding,
Director, Unemployment Insurance Services.

Perrella Gloves, Inc. Groversville, NY; Termination of Investigation

Pursuant to section 221 of the Trade Act of 1974, an investigation was initiated on March 30, 1987 in response to a worker petition which was filed by the Glove Cities Area Joint Board of the Amalgamated Clothing and Textile Workers Union on behalf of workers at Perrella Gloves, Inc., Groversville, New York.

An active certification covering the petitioning group of workers remains in effect (TA-W-16,287). Consequently, further investigation in this case would serve no purpose; and the investigation has been terminated.

Signed at Washington, DC, this 3rd day of April 1987.

Marvin M. Fooks,
Director, Office of Trade Adjustment Assistance.

FR Doc. 87-8665 Filed 4-18-87; 8:45 am
BILLING CODE 4510-30-M

Zenith Electronics Corp., Kostner Avenue Plant, Auto-Dashboard Display Department, Video Display Department, Chicago, IL, Negative Determination Regarding Application for Reconsideration

By an application dated February 5, 1987 the United Electrical Workers of America Independent requested administrative reconsideration of the Department's negative determination on the subject petition for trade adjustment assistance for former workers in the Auto-Dashboard Display Department and the Video Display Department of Zenith Electronics Corporation's Kostner Avenue plant in Chicago, Illinois. The denial notice was signed on December 19, 1986 and published in the Federal Register on January 9, 1987 (52 FR 879).

Pursuant to 29 CFR 60.18(c) reconsideration may be granted under the following circumstances:

(1) If it appears on the basis of facts not previously considered that the determination complained of was erroneous;

(2) If it appears that the determination complained of was based on a mistake in the determination of facts not previously considered; or

(3) If, in the opinion of the Certifying Officer, a misinterpretation of facts or of the law justified reconsideration of the decision.

The union claims that the transfer of subassembly work on the video display units to foreign plants caused Zenith Electronics to transfer its rework of the video display units overseas. With respect to the auto dashboard workers, the union claims that the Kostner Avenue plant produced auto dashboard units in 1986 and thus any worker separations are within the one-year time period necessary to be considered eligible to apply for adjustment assistance.

Findings in the investigation show that all rework on the video display units was completed when Zenith fulfilled current orders under its contract with the U.S. Government. Company officials stated that no video display
reread was ever taken from plant #2 and shipped overseas.

Video display subassemblies are not final products but are integrated into the production of video display units. The claim that the subassemblies not been transferred to foreign plants in 1985 then the reread on the video display units would have remained at the Kostner Avenue plant would not form a basis for certification. The courts have addressed the issue of component parts in United Shoe Workers of America, AFL-CIO v. Bedell, 506 F2d 174, D.C. Cir. 1974). The court held that imported finished women's shoes were not like or directly competitive with shoe components—shoe counters. Similarly, subassemblies for video display units which are incorporated into the finished article cannot be considered like or directly competitive with video display units.

The products considered in the Department's earlier investigation (TA-W-10,046), which led to a certification for workers at the Kostner Avenue plant—subassemblies for computers and cable decoder boxes are different than the products considered under petition TW-W-18,581.

With respect to the auto dashboards, company officials stated that all production of these units was transferred to Taiwan in early September, 1985. However, some of the units produced in Taiwan did not undergo a certain test; consequently, these units were recalled for this test. The affiants, in addition to their regular duties in the video display department, also monitored this test in 1986 on the recalled auto dashboards. These units had already been produced and shipped to domestic customers or were being readied to be shipped when Zenith found that some units required the test. This is not considered production but is incidental to their work in the Video Display Department.

Conclusion

After review of the application and investigative findings, I conclude that there had been no error or misinterpretation of the law or of the facts which would justify reconsideration of the Department of Labor's prior decision. Accordingly, the application is denied.

Signed at Washington, DC, this 6th day of April 1987
Robert O. Deslongchamps, Director, Office of Legislation and Actuarial Services, USW.

BILLING CODE 4510-30-M

Employment Standards Administration; Wage and Hour Division

Minimum Wages for Federal and Federally Assisted Construction; General Wage Determination Decisions

General wage determination decisions of the Secretary of Labor are issued in accordance with applicable law and are based on the information obtained by the Department of Labor from its study of local wage conditions and data made available from other sources. They specify the basic hourly wage rates and fringe benefits which are determined to be prevailing for the described classes of laborers and mechanics employed on construction projects of a similar character and in the localities specified therein.

The determinations in these decisions of prevailing rates and fringe benefits have been made in accordance with 29 CFR Parts 1, 2, and 3, as amended (48 Stat. 1949, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in 29 CFR Part 1, Appendix, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act. The prevailing rates and fringe benefits determined in these decisions shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

Good cause is hereby found for not utilizing notice and public procedure thereon prior to the issuance of these determinations as prescribed in 5 U.S.C. 553 and not providing for delay in the effective date as prescribed in that section, because the necessity to issue current construction industry wage determinations frequently and in large volume causes procedures to be impractical and contrary to the public interest.

General wage determination decisions, and modifications and supersedeas decisions thereto, contain no expiration dates and are effective from their date of notice in the Federal Register, or on the date written notice is received by the agency, whichever is earlier. These decisions are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable Federal prevailing wage law and 29 CFR Part 5. The wage rates and fringe benefits, notice of which is published herein, and which are contained in the Government Printing Office (GPO) document entitled "General Wage Determinations Issued Under The Davis-Bacon And Related Acts," shall be the minimum paid by contractors and subcontractors to laborers and mechanics.

Any person, organization, or governmental agency having an interest in the rates determined as prevailing is encouraged to submit wage rate and fringe benefit information for consideration by the Department. Further information and self-explanatory forms for the purpose of submitting this data may be obtained by writing to the U.S. Department of Labor, Employment Standards Administration, Wage and Hour Division, Division of Wage Determinations, 200 Constitution Avenue NW., Room S-3504, Washington, DC 20210.

Correction

On April 3, 1987 notice of modified general wage determination decisions was published in the Federal Register. A certain decision being modified was omitted. That decision and its volume and page number are listed below.

Volume I

Alabama: .................................


Modifications to General Wage Determination Decisions

The numbers of the decisions listed in the Government Printing Office document entitled "General Wage Determinations Issued Under the Davis-Bacon and Related Acts" being modified are listed by Volume, State, and page number(s). Dates of publication in the Federal Register are in parentheses following the decisions being modified.

Volume I

Connecticut:

CT87-1 (January 2, 1987) pp. 70, pp. 72-73.

New Jersey:

Oklahoma:
OK87-14 (January 2, 1987) ... p. 683.

Arkansas:
AR87-3 (January 2, 1987)...... p. 10.

Iowa:
IA87-5 (January 2, 1987)...... p. 43.

Indiana:

Illinois:

Michigan:
MI87-2 (January 2, 1987)..... pp. 428-438
                                 pp. 438a-438b.

                               454-455.


MI87-7 (January 2, 1987)...... pp. 477-480b.

MI87-12 (January 2, 1987)...... pp. 504-506.

MI87-17 (January 2, 1987)..... p. 520.

Oklahoma:
OK87-13 (January 2, 1987) ... p. 683.

OK87-14 (January 2, 1987) ... p. 903.

Volume III

Oregon:

Listing by Location [index] ..... p. xxxix.

General Wage Determination
Publication

General wage determinations issued under the Davis-Bacon and related Acts, including those noted above, may be found in the Government Printing Office (GPO) document entitled “General Wage Determinations Issued Under The Davis-Bacon And Related Acts” This publication is available at each of the 50 Regional Government Depository Libraries and many of the 1,400 Government Depository Libraries across the country. Subscriptions may be purchased from:

When ordering subscription(s), be sure to specify the State(s) of interest, since subscriptions may be ordered for any or all of the three separate volumes, arranged by State. Subscriptions include an annual edition (issued on or about January 1) which includes all current general wage determinations for the States covered by each volume. Throughout the remainder of the year, regular weekly updates will be distributed to subscribers.

Signed at Washington, DC, this 10th day of April 1987.

Alan L. Moss,
Director, Division of Wage Determinations.

[FR Doc. 87-8484 Filed 4-16-87; 8:45 am]
BILLING CODE 4510-27-M

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

OREGON STATE STANDARDS; APPROVAL

1. Background

Part 1953 of Title 29, Code of Federal Regulations, prescribes procedures under section 18 of the Occupational Safety and Health Act of 1970 (hereinafter called the Act) by which the Regional Administrator for Occupational Safety and Health (hereinafter called Regional Administrator) under a delegation of authority from the Assistant Secretary of Labor for Occupational Safety and Health (hereinafter called the Assistant Secretary) (29 CFR 1953.4) will review and approve standards promulgated pursuant to a State plan which has been approved in accordance with section 18(c) of the Act and 29 CFR Part 1902.

On December 28, 1972, notice was published in the Federal Register (37 FR 28628) of the approval of the Oregon plan and the adoption of Subpart D to Part 1952 containing the decision.

The Oregon plan provides for the adoption of State standards which are at least as effective as comparable Federal standards promulgated under section 8 of the Act. Section 1953.20 provides that where any alteration in the Federal program could have an adverse impact on the at least as effective as status of the State program, a program change supplement to a State plan shall be required.

In response to Federal standards changes the State has submitted by letter dated December 28, 1986, from William J. Brown, Director, to James W. Lake, Regional Administrator, and incorporated as part of the plan, an amendment to State rules comparable to 29 CFR 1910.1047 Ethylene Oxide (amended), as published in the Federal Register (51 FR 25053) on July 10, 1986. The wording in Appendices A through D of the Federal standard has been amended to reference the non-mandatory status of these appendices.

On August 27, 1986, the Notice of Proposed Amendment of Rules was mailed to those persons on the State's mailing list established pursuant to OAR 436-01-000. The notice was published in the State Administrative Rules Bulletin on November 1, 1986. These actions failed to elicit requests for public hearings. The State’s rules, contained in OAR 437 Division 156, Ethylene Oxide Appendices A through D, were adopted and became effective on December 4, 1986.

2. Decision

Having reviewed the State submission in comparison with the amendment to the Federal standard, it has been determined that the State standard amendment is identical to the Federal standard amendment, and accordingly is approved.

3. Location of Supplement for Inspection and Copying

A copy of the standards supplement, along with the approved plan, may be inspected and copied during normal business hours at the following locations: Office of the Regional Administrator, Occupational Safety and Health Administration, Room 6003, Federal Office Building, 909 First Avenue, Seattle, Washington 98174; Workers’ Compensation Department, Labor and Industries Building, Salem, Oregon 97310; and the Office of State Programs, Room N-3476, 200 Constitution Avenue, NW., Washington, DC 20210.

4. Public Participation

Under 29 CFR 1953.2(c) the Assistant Secretary may prescribe alternative procedures to expedite the review process or for other good cause which may be consistent with applicable laws. The Assistant Secretary finds that good cause exists for not publishing the supplement to the Oregon State Plan as a proposed change and making the Regional Administrator’s approval effective upon publication for the following reasons:

1. The standards are identical to the Federal standards which were promulgated in accordance with Federal law including meeting requirements for public participation.

2. The standards were adopted in accordance with the procedural requirements of State law and further participation would be unnecessary.

This decision is effective April 17, 1987


Signed at Seattle, Washington, this 17th day of February 1987.

James W. Lake,
Regional Administrator.

[FR Doc. 87-6861 Filed 4-16-87; 8:45 am]
BILLING CODE 4510-29-M

WASHINGTON STATE STANDARDS; APPROVAL

1. Background

Part 1953 of Title 29, Code of Federal Regulations prescribes procedures under section 18 of the Occupational Safety
and Health Act of 1970 (hereinafter called the Act) by which the Regional Administrator for Occupational Safety and Health (hereinafter called the Assistant Secretary) under a delegation of authority from the Assistant Secretary of Labor for Occupational Safety and Health (hereinafter called the Assistant Secretary) (29 CFR 1953.4) will review and approve standards promulgated pursuant to a State plan which has been approved in accordance with section 18(c) of the Act and 29 CFR Part 1902.

On January 26, 1973, notice was published in the Federal Register (38 FR 2421) of the approval of the Washington plan and the adoption of Subpart F to Part 1905 containing the decision.

The Washington plan provides for the adoption of State standards that are at least as effective as comparable Federal standards promulgated under section 6 of the Act. Section 1953.20 provides that any alteration in the Federal program could have an adverse impact on the at least as effective as status of the State program, a program change required.

In response to Federal standards changes, the State has submitted by letter dated September 26, 1986, from C. David Hutchins, Assistant Director, to James W. Lake, Regional Administrator, and incorporated as part of the plan, a State standard amendment comparable to the Federal standard amendment to 29 CFR 1910.1000, Table Z–1 (Cotton Dust), as published in the Federal Register (50 FR 51173) on December 13, 1985. The Federal amendment deleted the footnote attached to the entry “cotton dust (raw)” and added a new footnote “e.” The State standards amendment, which is identical to the Federal, is contained in WAC 296-62-07515. It was adopted on July 25, 1986, and became effective on August 23, 1986, pursuant to RCW 34.04.040(2), 34.17.040, 34.17.050, Public Meetings Act RCW 42.30, Administrative Procedures Act RCW 34.04 and the State Register Act RCW 34.08 as ordered and transmitted under Washington Administrative Order No. 86-28.

2. Decision

The above State standard amendment has been reviewed and compared with the relevant Federal standard amendment. OSHA has determined that the State standard amendment is identical to the Federal standard amendment, and accordingly is approved.

3. Location of Supplement for Inspection and copying

A copy of the standards supplement, along with the approved plan, may be inspected and copied during normal business hours at the following locations:

- Federal Office Building, 909 First Avenue, Seattle, Washington 98174;
- Department of Labor and Industries, General Administration Building, Olympia, Washington 98501; and
- Office of State Programs, Room N–3478, 200 Constitution Avenue, NW, Washington, DC 20210.

Public Participation

Under 29 CFR 1953.20(c) the Assistant Secretary may prescribe alternative procedures to expedite the review process or for other good cause which may be consistent with applicable laws. The Assistant Secretary finds that good cause exists for not publishing the supplement to the Washington State Plan as a proposed change and making the Regional Administrator approval effective upon publication for the following reasons:

1. The standards are identical to the Federal standards which were promulgated in accordance with Federal law including meeting requirements for public participation.

2. The standards were adopted in accordance with the procedural requirements of State law and further participation would be unnecessary.

This decision is effective April 17, 1987

(Section 18, Pub. L. 91–598, 84 Stat. 1608 [29 U.S.C. 607].)

Signed at Seattle, Washington, this 1st day of December, 1986.

James W. Lake,
Regional Administrator.

Notice of Application

SUMMARY: This notice announces: (1) The application of Tomaro Contractors, Inc., for a permanent variance and an interim order from the Decompression Tables, Appendix A to Subpart S of Part 1926, §§ 1926.800 through 1926.804, which concern compressed air. The applicant has requested that it be authorized to substitute a decompression table using oxygen, introduced via pressure demand respirators, as the gaseous medium in lieu of compressed air and (2) The denial of interim order.

DATE: The last date for interested persons to submit comments is June 16, 1987. The last date for affected employers and employees to request a hearing is June 16, 1987.

ADDRESS: Send comments or requests for a hearing to: Office of Variance Determination, Occupational Safety and Health Administration, U.S. Department of Labor, Third Street and Constitution Avenue, NW., Room N3651, Washington, DC 20210.

FOR FURTHER INFORMATION CONTACT: James J. Concannon, Director, Office of Variance Determination, at the above address, Telephone: (202) 523–7193.

or the following Regional and Area Office:

U.S. Department of Labor—OSHA, 32nd Floor, Rm. 3244, 230 South Dearborn Street, Chicago, Illinois 60604

U.S. Department of Labor—OSHA, Henry S. Reuss Building, 310 West Wisconsin Avenue, Suite 1160, Milwaukee, Wisconsin 53203

Notice of Application

SUPPLEMENTARY INFORMATION: Notice is hereby given that Tomaro Contractors, Inc., Post Office Box 155, Cudahy, Wisconsin 53110, has made application pursuant to section 6(d) of the Occupational Safety and Health Act of 1970 (84 S. 1598; 29 U.S.C. 655) and 29 CFR 1905.11 for a permanent variance and an interim order from the Decompression Tables, Appendix A to Subpart S of Part 1926 (§§ 1926.800–1926.804).

The address of the place of employment that will be affected by the application is as follows: County Line Road, immediately west of 106th Street, Milwaukee, Wisconsin in a tunnel which will be 2,600 feet in length when completed.

The purpose of Appendix A to Subpart S is to allow employees who have been working under pressurized conditions to be brought back to ambient surface pressure in a safe manner.

The applicant certifies that employees who would be affected by the variance
have been notified of the application by giving a copy of it to their authorized employee representatives and by posting a copy at all places where notices to employees are normally posted. Employees have also been informed of their right to petition the Assistant Secretary for a hearing.

Regarding the merits of the applications, Tomaro Contractors contends that it proposed conditions, practices, means and methods will provide employment at least as safe and healthful as would prevail if it complied with the Decompression Tables.

Appendix A to Subpart S (§§ 1926.800 through 1926.804). Under Subpart S, where decompression is required, the compressed air tables in Appendix A must be used.

The applicant estimates that the anticipated air pressure in the tunnel, which is being driven under compressed air, may reach levels in excess of 18 pounds per square inch gauge (psig). It therefore states that it intends to use oxygen decompression in order to provide a safer decompression for the workmen as well as to shorten the length of the decompression time (when compared with compressed air). The oxygen is to be introduced to each employee by means of a pressure-demand respirator and is not intended to be present in the environment of the decompression lock.

Tomaro Contractors states that oxygen decompression tables labeled Autodec III (Oxygen) as found in “Safe Decompression Schedules for Caisson Workers,” Final Report, Research Grant No. SR 01 Of GS-87-03, produced for the National Institute for Occupational Safety and Health, dated December 1, 1983, will be used if the variance is granted.

These tables, according to the applicant, have been tested at 2 pound increments from 14 pounds through 45 pounds and none of the test subjects developed decompression sickness using the schedules which call for an eight-hour working day divided between working time and decompression time. Additionally, according to Tomaro Contractors, none of the subjects testing these tables developed bone lesions as determined by skeletal X-ray and bone scans.

From the above data, the applicant infers that the Autodec III (Oxygen) tables are safer than the existing OSHA tables which causes a 33 percent incidence of a specific form of bone lesions, dysbanc osteonecrosis, when used at pressures in excess of 36 pounds. This incidence, according to Tomaro Contractors, is documented in a report published in the Journal of Occupational Medicine in October 1982 entitled, "Aseptic Necrosis in Compressed Air Tunnel Workers Using Current OSHA Decompression Schedules."

Further, the applicant contends that its medical consultant has documented that application of the OSHA tables produced decompression sickness on 42.5 percent of the working days on a previous job in Milwaukee, when pressures ranged between 19 and 31 psig.

Tomaro Contractors further contends that applying the OSHA tables resulted in one reported case of bends on its present job at the low pressure of 16 pounds and that at the time of this application workmen informed the applicant that some of them had been experiencing "air pains" in the legs using the 14 psi OSHA tables at 13 pounds pressure.

In summary, the applicant contends that it has demonstrated that the practices and conditions it proposes to use will provide place of employment which is as safe and healthful as that provided under the Decompression Tables, Appendix A to Subpart S, the provision from which the variance is sought. The applicant submits the following proposed supplementary rules for inclusion in a variance order authorizing the use of oxygen during decompression of compressed air tunnel workers.

Proposed Supplementary Rules for the Use of Oxygen During Decompression of Compressed Air Tunnel Workers

I. Physical Plant and Equipment

A. Tight fitting, double-seal oro-nasal masks equipped with a discharge hose to exhaust exhaled oxygen from the decompression lock shall be provided. This type of mask and its associated valves and piping are collectively termed an "overboard dump system". When a work-shift consists of ten men or less, at least two extra masks shall be placed in the decompression lock. If more than ten men are decompressing at a time, four extra masks shall be placed in the lock. These masks need not be connected when not in use. All masks shall be equipped with a demand regulator on the inlet side and a vacuum regulator on the discharge side. The vacuum regulator shall be capable of handling pressure differentials from the interior of the lock to the outside of up to 26 psig. A second vacuum reducer may be interposed in the discharge manifold as it leaves the chamber to accomplish this if necessary.

B. Oxygen shall be supplied to a manifold in the decompression lock into which the masks can be plugged using quick disconnect fittings. This manifold shall be oxygen cleaned at the time of installation and shall be of copper with silver soldered couplings.

C. An oxygen regulator installed inside the lock of sufficient size to supply oxygen to the number of men decompressing shall regulate the admission of oxygen to the manifold at a pressure of 50 lbs. greater than chamber pressure.

D. The oxygen supply can be from high pressure oxygen cylinders connected to a manifold with a reducer valve fitted to the high pressure manifold discharge set at 150 lbs. The oxygen cylinders and manifold may be situated in the tunnel in a protected area or topside. In any case, the lock tender must be quickly able to visually verify the cylinder pressures. Alternatively, a cryogenic or liquid oxygen source of adequate size may be used having a vaporization pressure set at 150 psig.

E. The available oxygen supply at the beginning of any decompression shall be equal to 150 percent of the anticipated requirement. Minimum requirements can be calculated on the basis that each H cylinder contains 220 cu. ft. of usable oxygen at the starting pressure of 2,250 psig. It is anticipated that the average man will consume approximately 0.5 cu. ft. per minute at atmospheric pressure. Decompression, however, will be carried out at greater than normal atmospheric pressure so the final result will have to be multiplied by the number of atmospheres absolute or fractions thereof which the crew experiences during decompression.

Pounds Per Square Inch Guage (PSIG) Expressed In Atmospheres Absolute

<table>
<thead>
<tr>
<th>4 lbs.-1.27 atmospheres</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 lbs.-1.54 atmospheres</td>
</tr>
<tr>
<td>12 lbs.-1.82 atmospheres</td>
</tr>
<tr>
<td>16 lbs.-2.09 atmospheres</td>
</tr>
<tr>
<td>20 lbs.-2.36 atmospheres</td>
</tr>
</tbody>
</table>

An example of the calculation for the minimum oxygen requirement is given below:

Assume that a tunnel crew of six men is decompressing on the oxygen table from six hours exposure at 24 psig. The decompression requires a five minute stop on air at 12 psig, a thirty minute stop on oxygen at 6 psig, then five minutes of air at 4 psig followed by sixty minutes of oxygen at 4 psig. No oxygen is required at 12 psig, but thirty minutes and sixty minutes of oxygen are required at 8 and 4 psig respectively. As seen from the table, 8 psig is equal to 1.54 atmospheres and 4 psig is equal to 1.27 atmosphere.

Calculations are made as follows:
II. Operating Procedures When Using Oxygen Decompression

A. Before the crew enters the lock, the lock tender will pressurize the lock with compressed air and calibrate the oxygen meter attached to the exhaust line externally to 21 percent ensuring there is flow through the exhaust lines at the time of calibration.

B. A responsible foreman shall be present in the lock at all times when oxygen is breathed during decompression.

C. There will be absolutely no smoking material taken into the compressed air tunnel at any time and there will be absolutely no smoking at any time during decompression in the lock.

D. Signs will be conspicuously posted at both ends of the decompression lock strictly forbidding any smoking, carrying or producing any fire or open flame.

E. When oxygen masks are applied, they shall be applied simultaneously by all workers and the lock tender shall not start recording oxygen decompression time until all of the workers have started to breath oxygen.

F. The demand regulators on the masks shall be adjusted so as to not to produce a free flow of oxygen at any time. The foreman shall verify this.

G. When the oxygen masks are removed, the foreman shall verify that no masks are free flowing after they have been removed. He shall instruct the men to carefully monitor this also.

H. Should an oxygen mask fail for any reason, one of the spare masks is to be substituted. The time required for the substitution of the mask on any given worker shall be added to the total oxygen time for that stop.

I. The lock tender shall continuously ventilate the lock so as to maintain the oxygen content of the discharge air below 23 percent. If the high oxygen alarm goes off indicating a percentage greater than 23 percent, he shall immediately increase the ventilation rate to bring the oxygen content of the air below 23 percent. He shall also immediately notify the foreman so that he may search for an oxygen leak from either a mask or piping.

J. Men who are breathing oxygen are to remain at rest and are not to do exercise of any kind. They shall be suitably dressed to avoid chilling.

K. The foreman shall carry a portable hand held oxygen meter in the lock and shall calibrate it properly at lock pressure before oxygen breathing is commenced. Alternatively, the lock tender may calibrate it to 21 percent outside the lock at normal atmospheric pressure and then place the meter in the lock before pressurizing it. The oxygen level in the air in the pressurized lock will read higher than normal even when no additional oxygen is present.

The table below indicates the calibration settings for the portable oxygen meter in normal compressed air at various pressures.

<table>
<thead>
<tr>
<th>PSIG</th>
<th>Calibration setting at pressure percent</th>
<th>Maximum permissible when O₂ in use (percent)</th>
<th>Atmospheres absolute</th>
</tr>
</thead>
<tbody>
<tr>
<td>20</td>
<td>49.6</td>
<td>54.3</td>
<td>2.36</td>
</tr>
<tr>
<td>16</td>
<td>48.0</td>
<td>51.1</td>
<td>2.22</td>
</tr>
<tr>
<td>12</td>
<td>46.9</td>
<td>48.1</td>
<td>2.09</td>
</tr>
<tr>
<td>14</td>
<td>41.0</td>
<td>44.9</td>
<td>1.95</td>
</tr>
<tr>
<td>10</td>
<td>38.2</td>
<td>41.9</td>
<td>1.82</td>
</tr>
<tr>
<td>35</td>
<td>35.3</td>
<td>30.6</td>
<td>1.66</td>
</tr>
<tr>
<td>8</td>
<td>32.3</td>
<td>35.4</td>
<td>1.54</td>
</tr>
<tr>
<td>12</td>
<td>29.4</td>
<td>32.4</td>
<td>1.41</td>
</tr>
</tbody>
</table>

The oxygen level will read higher in the lock under pressure because the oxygen molecules are packed closer together. The oxygen meter probe in the exhaust line outside the chamber will read normally as the air has already been decompressed to normal pressure before it contacts the probe.

While in the lock, the foreman should check his portable meter occasionally at various sites among the decompressing crew to detect any leaks in the oxygen breathing equipment early. This table is to be posted prominently in the decompression lock for the foreman’s use.

L. In the very remote possibility that anyone should experience an oxygen reaction (seizure) the foreman should immediately remove the man’s oxygen mask and assure that he has an airway by turning his head back and pulling up on his chin. When the seizure is over, he may be turned on his side, but again maintaining the airway. The physician shall be notified immediately.

M. Decompression, following an oxygen reaction or if any worker for any reason cannot breathe oxygen, shall be in strict accordance with instructions from the retained physician. If the physician cannot be located, decompression from the point where oxygen breathing was interrupted shall be continued on the air decompression table repeating the stop where the oxygen reaction occurred.

N. The lock tender shall carefully record all oxygen breathing periods as well as the total length of the decompression stop and shall notify the foreman when oxygen masks are to be donned and doffed.

O. At the conclusion of decompression, all used oxygen masks are to be removed from the regulators, and washed in a suitable antiseptic solution which is not injurious to rubber.

P. Full beards or beards which interfere in any way with a tight seal of the oxygen mask shall not be permitted. Mustaches are permitted.

Q. Vaseline and other greases may not be used to insure a seal of the mask over beards.

R. The foreman shall instruct all of the workers regarding the hazards of fire when oxygen breathing procedures are disregarded.

S. The lock tender shall insure that clear, dry masks are available to each shift before they start decompression and that the extra masks are available in the lock.

T. The lock tender at the conclusion of each shift shall check the pressure of the oxygen cylinders and ascertain that
enough oxygen is ready for
decompression of the next shift.

U. If for any reason oxygen breathing
during decompression cannot be carried
out according to the exact schedule, the
retained physician shall be notified
immediately.

V. The lock tender shall insure that the
decompression lock is maintained
conspicuously clean with no
unnecessary combustibles present in the
lock.

W. Before each shift decompresses,
the lock tender shall check the fire hose
valves to verify that fire-fighting water
is available in the lock.

X. In the event of fire, the lock tender
shall immediately shut off the oxygen.
If the fire is serious and not immediately
controlled, the lock tender shall
decompress the lock to the surface at
once so that the crew can escape. When
the lock is on the surface, the crew shall
be immediately transferred to the
medical lock on the surface, and the
medical lock taken to

Y. Whenever oxygen is to be used for
decompression of workmen in the
compressed air environment, a
physician shall be retained who will
have direct control of the training of the
workmen in proper use of oxygen for
decompression and who shall inspect
the decompression lock used for oxygen
decompression on at least a weekly
basis or more often as required. The
physician shall also be responsible for
seeing that required logs are kept. He
shall be immediately available in case of
emergency or his designate shall be
available. The physician must be
experienced with the administration of
oxygen to human subjects at pressures
greater than ambient.

Z. No employee shall undergo oxygen
decompression until he/she has been
fully instructed in the proper procedure
for using oxygen breathing equipment,
has a complete understanding of the
mechanism of oxygen enhanced nitrogen
elimination and understands the
importance of following the prescribed
decompression schedule.

Denial of Interim Order
Tomaro Contractors, Inc. also
requested, as the time of their variance
application, an interim order to enable
them to use the Autodec III (Oxygen)
decompression tables until a decision is
reached on their request for permanent
variance.

The Assistant Secretary has decided
to deny the request for an interim order.

Oxygen is not normally permitted in a
tunnel environment and presents a
greater potential hazard from fire and
explosion than does compressed air.
Futher investigation and evaluation of the
present conditions at the place of
employment and the proposed
procedures by an onsite visit, to be
scheduled as soon as convenient for
both parties, are necessary. OSHA will
proceed very cautiously in authorizing
any practice (even on an interim basis)
that is alleged to be as safe and
healthful as practices justified by any
OSHA rulemaking.

Therefore, pursuant to the authority in
section 8(d) of the Occupational Safety
and Health Act of 1970, in 29 CFR
1905.11(c) and in Secretary of Labor’s
Order No. 9–83 (46 FR 35736), the
applicant is denied an interim order to
operate in accordance with its request
until a decision is rendered on the
application for variance.

All interested persons, including
employers and employees who believe
they would be affected by the grant or
denial of the application for variance
are invited to submit written data,
views, and arguments relating to the
issues raised in the application no later
than June 16, 1987. In addition,
employers and employees who believe
they would be affected by a grant or
denial of the variance may request a
hearing on the application no later than
June 16, 1987 in conformity with the
requirements of 29 CFR 1905.15.
Submission of written comments and
requests for a hearing should be in
quaduplicate, and must be addressed to
the Office of Variance Determination at
the above address.

Signed at Washington, DC, this 14th day
of April, 1987.

John A. Pendergrass,
Assistant Secretary.
[FR Doc. 87–6215 Filed 4–19–87; 8:45 am]
BILLING CODE 4510–35–M

LEGAL SERVICES CORPORATION
Migrant Farmworkers—Number and
Distribution; Availability of Report
AGENCY: Legal Services Corporation.
ACTION: Notices of availability.

SUMMARY: Legal Services Corporation
(LSC) is making available a report
entitled, “Migrant Farmworkers:
Number and Distribution,” for public
comment as a matter of discretion.
Comments will be considered by LSC in
reviewing the report and should be
submitted to LSC by May 11, 1987

ADDRESS: Requests for copies of the
report and submissions of comments
should be directed to: Daryl Borgquist,
Manager, Division of Public Affairs,
Legal Services Corporation, 400 Virginia
Avenue, SW., Washington, DC 20024–
2751, (202) 863–1843.

FOR FURTHER INFORMATION CONTACT:
Daryl Borgquist, Manager, Division of
Public Affairs, Legal Services
Corporation, 400 Virginia Avenue, SW.,
Washington, DC 20024–2751, (202) 863–
1843.

Timothy H. Baker,
Secretary.
[FR Doc. 87–6215 Filed 4–19–87; 8:45 am]
BILLING CODE 4510–35–M

NATIONAL FOUNDATION ON THE
ARTS AND THE HUMANITIES
Agency Information Collection
Activities Under OMB Review

AGENCY: National Endowment for the
Humanities.

ACTION: Notice.

SUMMARY: The National Endowment for
the Humanities (NEH) has sent to the
Office of Management and Budget
(OMB) the following proposals for the
collection of information under the
provisions of the Paperwork Reduction
Act (44 U.S.C. Chapter 35).

DATES: Comments on this information
collection must be submitted on or
before August 1, 1987

ADDRESSES: Send comments to Ms.
Ingrid Foreman, Management Assistant,
National Endowment for the
Humanities, Administrative Services
Office, Room 202, 1100 Pennsylvania
Avenue, NW., Washington, DC 20506
(202) 786–0233 and Mr. Joseph Lackey,
Office of Management and Budget, New
Executive Office Building, 725 Jackson
Place, NW., Room 3208, Washington, DC
20503 (202) 395–7316.

FOR FURTHER INFORMATION CONTACT:
Ms. Ingrid Foreman, National
Endowment for the Humanities,
Administrative Service Office, Room
202, 1100 Pennsylvania Avenue, NW.,
Washington, DC 20506 (202) 786–0233
from whom copies of forms and
supporting documents are available.

SUPPLEMENTARY INFORMATION: All of the
entries are grouped into new forms,
revisions, or extensions. Each entry is
issued by NEH and contains the
following information: (1) The title of the
form; (2) the agency form number, if
applicable; (3) how often the form must
be filled out; (4) who will be required or
asked to report; (5) what form will be
used for; (6) an estimate of the number of
responses; (7) an estimate of the total
number of hours needed to fill out the form. None of these entries are subject to 42 U.S.C. 3504(h).

Title: NEH—Division of Education Programs—Guidelines and Application Instructions

Form Number: 3139-0059

Frequency of Collection: Collection occurs once yearly, according to individual program application deadline.

Respondents: Individuals or households

Non-profit institutions

Use: The Guidelines and application instructions provide direction for preparing narrative and budgetary parts of applications for grant funds and request additional information regarding grants recently received by applicants.

Estimated Number of Respondents: 275

Estimated Hours for Respondents to Provide Information: 1100

Susan Metts,
Assistant Chairman for Administration.

[FR Doc. 87-8690 Filed 4-18-87; 8:45 am]
BILLING CODE 7535-01-M

NUCLEAR REGULATORY COMMISSION

Advisory Committee on Reactor Safeguards Joint Subcommittees on Metal Components/Auxiliary Systems; Meeting

The ACRS Subcommittees on Metal Components/Auxiliary Systems will hold a joint meeting on May 5, 1987, Room 1046, 1717 H Street NW., Washington, DC.

The entire meetings will be open to public attendance.

The agenda for subject meeting shall be as follows: Tuesday, May 5, 1987—8:30 A.M. until the conclusion of business.

The Subcommittees will explore further the questions in Congressman P Sharp's letter on implications for the safety of nuclear power plants of the recent Surry accidents.

Oral statements may be presented by members of the public with the concurrence of the Subcommittee Chairman; written statements will be accepted and made available to the Committee. Recordings will be permitted only during those portions of the meeting when a transcript is being kept, and questions may be asked only by members of the Subcommittee, its consultants, and staff. Persons desiring to make oral statements should notify the ACRS staff member identified below as far in advance as practicable so that appropriate arrangements can be made.

During the initial portion of the meeting, the Subcommittee, along with any of its consultants who may be present, may exchange preliminary views regarding matters to be considered during the balance of the meeting.

The Subcommittee will then hear presentations by and hold discussions with representatives of the NRC Staff, its consultants, and other interested persons regarding this review.

Further information regarding topics to be discussed, whether the meeting has been cancelled or rescheduled, the Chairman's ruling on requests for the opportunity to present oral statements and the time allotted therefor can be obtained by a prepaid telephone call to the cognizant ACRS staff member, Mr. Elpidio Igne (telephone 202/534-1414) between 8:15 A.M. and 5:00 P.M. Persons planning to attend this meeting are urged to contact the above named individual one or two days before the scheduled meeting to be advised of any changes in schedule, etc., which may have occurred.


Morton W. Libarkin,
Assistant Executive Director for Project Review.

[FR Doc. 87-8705 Filed 4-19-87; 8:45 am]
BILLING CODE 7550-01-M

[NUREG-0800]

Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants; Issuance and Availability for Comment; Proposed New Section 6.5.5 and Regulatory Analysis and Supporting Technical Reports


The proposed new SRP Section 6.5.5 consists of revision O, its supporting Regulatory Analysis, and the supporting Technical Report "Effectiveness of BWR Pressure Suppression Pools in Retaining Fission Products." The new section would permit pressure suppression pools to be considered as mitigative engineered safety features capable of retaining some fraction of fission products that might be directed into them following potential reactor accidents. Its review procedures would provide means of obtaining estimates of the fractions of fission products that should be assumed to be retained by the pools. These procedures would become necessary following a proposed future revision of Regulatory Guide 1.3, which currently denies retention capability to suppression pools.

The revision would be required for future plants, but would be optional for present licensees and is part of a proposed series of SRP and Regulatory Guide changes intended to implement the Commission's Severe Accident Policy and to introduce the result of recent severe accident regulatory research into staff practices. Comments are being solicited from interested organizations, groups and individuals. The staff will evaluate the comments received, and address them, as appropriate, in the final documents.

Copies of the "For Comment" documents will be available after April 6, 1987. Copies will be sent directly to utilities, utility industry groups, associations, environmental and public interest groups. Other copies will be available for review at the NRC Public Document Room, 1717 H Street NW., Washington, DC, and the Commission's Local Public Document Rooms located in the vicinity of nuclear power plants.

Addresses of these Local Public Document Rooms can be obtained from the Chief, Public Document Branch, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (202) 634-3273.

Comments should be sent to the Secretary of the Commission U.S. Nuclear Regulatory Commission, Washington, DC 20555, Attention: Docketing and Service Branch, by June 5, 1987.

Dated at Bethesda, Maryland, this 10th day of April.

For the Nuclear Regulatory Commission.

Harold R. Denton,
Director, Office of Nuclear Reactor Regulation.

[FR Doc. 87-8714 Filed 4-18-87; 8:45 am]
BILLING CODE 7550-01-M

[NUREG-0800]

Standard Review Plan for the Review of Safety Analysis Reports for Nuclear Power Plants; Issuance (and Availability for Comment) of Proposed Revision 2 to SRP Section 6.5.2 and Regulatory Analysis and Supporting Technical Documents

The U.S. Nuclear Regulatory Commission (NRC) has published proposed revision 2 to Section 6.5.2, "Containment Spray as a Fission
SECURITIES AND EXCHANGE COMMISSION

[File No. 81–745]

Application and Opportunity for Hearing: Mrs. Fields, Inc.

April 10, 1987

Notice is hereby given that Mrs. Fields, Inc. ("Applicant") has filed an application pursuant to section 12(h) of the Securities Exchange Act of 1934, as amended, (the "1934 Act") for an order exempting Applicant from the registration requirements under section 12(g) of the 1934 Act.

For a detailed statement of the information presented, all persons are referred to the application which is on file at the offices of the Commission in the Public Reference Room, 450 Fifth Street, NW., Washington, DC 20549.

Notice is further given that any interested person not later than May 4, 1987 may submit to the Commission in writing his views or any substantial facts bearing on the application or the desirability of a hearing thereon. Any such communication or request should be addressed: Secretary, Securities and Exchange Commission, 450 Fifth Street, NW., Washington, DC 20549, and should state briefly the nature of the interest of the person submitting such information or requesting the hearing, the reason for such request, and the issues of fact and law raised by the application which he desires to controvert.

Persons who request a hearing or advice as to whether a hearing is ordered will receive any notices and orders issued in this matter, including the date of the hearing (if ordered) and any postponement thereof. At any time after that date, an order granting the application may be issued upon request or upon the Commission's own motion.

For the Commission, by the Division of Corporation Finance, pursuant to delegated authority.

Shirley E. Hollis, Assistant Secretary.

[FR Doc. 87–8710 Filed 4–16–87; 8:45 am]

BILLING CODE 8010–01–M

[Rel. No. IC–15678; 812–6638]

FSA Capital, Inc., Application

April 13, 1987

AGENCY: Securities and Exchange Commission ("SEC").

ACTION: Notice of application for an amended order under the Investment Company Act of 1940 (the "1940 Act").

Applicant: FSA Capital, Inc. ("Applicant").

Relevant 1940 Act Sections:

Exemption is requested under section 6(c) from all provisions of the 1940 Act.

Summary of Application: Applicant seeks an order amending an existing order conditionally exempting it from all provisions of the 1940 Act (File Number 812–6442. Investment Company Act Release No. 15291, September 8, 1986) (the "Order") to permit the issuance of one or more classes of adjustable interest rate bonds secured by certain mortgage related collateral, the election by Applicant that one or more series of its bonds secured by certain mortgage related collateral be treated as a real estate mortgage investment conduit (a "REMIC") and the sale of the residual interest in such series.

Filing Date: The application for an amended order was filed on February 23, 1987.

Hearing or Notification of Hearing: If no hearing is ordered, the application will be granted. Any interested person may request a hearing on this application, or ask to be notified if a hearing is ordered. Any requests must be received by the SEC by 5:30 p.m. on May 8, 1987. Requests a hearing in writing, giving the nature of your interest, the reason for the request, and the issues you contest. Serve the Applicant with the request, either personally or by mail, and also send it to the Secretary of the SEC, along with proof of service by affidavit, or, for lawyers, by certificate. Request notification of the date of a hearing by writing to the Secretary of the SEC.

ADDRESSES: Secretary, SEC, 450 Fifth Street, NW., Washington, DC 20549. Applicant, 300 Delaware Avenue, Suite 1703, Wilmington, Delaware 19899.

FOR FURTHER INFORMATION CONTACT: Joyce M. Pickholz, Staff Attorney, (202) 272–3046, or H.R. Hallock, Jr., Special Counsel, (202) 272–3030 (Office of Investment Company Regulation).

SUPPLEMENTARY INFORMATION: Following is a summary of the application; the complete application is available for a fee from either the SEC's Public Reference Branch in person or the SEC's commercial copyer (800) 231–3262 (in Maryland [301] 258–4300).

Applicant's Representations: 1. Applicant, a Delaware corporation, is a wholly-owned limited purpose subsidiary of Franklin Financial Services, Inc., a Kansas corporation, which itself is a wholly-owned subsidiary of Franklin Savings Association, a Kansas-chartered stock savings and loan association. Pursuant
to its certificate of incorporation, the Applicant is restricted to a limited range of activities relating to the acquisition, ownership, holding and pledging of Mortgage Certificates, the issuance and sale of Bonds collateralized by Mortgage Certificates and other activities incidental thereto. The Applicant will have no significant assets other than those pledged as collateral for the Bonds.

2. Applicant may issue one or more series ("Series") of bonds ("Bonds") secured by Mortgage Certificates. Each Series of Bonds will consist of one or more classes of Bonds, including compound interest Bonds, non-compound interest Bonds, adjustable interest rate Bonds, or any combination thereof.

3. Initially, all of the residual interests in the Bonds of any Series will be held by the Applicant. Applicant anticipates that it may sell such residual interests at the time of the issuance of the Bonds, or at some later date.

4. Without the consent of each Bondholder to be affected, neither the Applicant, the Trustee nor any holders of the residual interests in the Bonds of any Series will be able to: (a) Change the stated maturity on any Bond; (b) reduce the principal amount or the rate of interest on any Bonds; (c) change the provisions relating to the application of distributions on the Mortgage Certificates to the payment of principal of Bonds; (d) impair or adversely affect the Mortgage Certificates securing a Series of Bonds; (e) permit the creation of a lien ranking prior to or on a parity with the lien of the related Indenture with respect to the Mortgage Certificates; or (f) otherwise deprive the Bondholders of the security afforded by the lien of the related Indenture.

5. The sale of the residual interests in the Bonds of any Series will not alter the payment of cash flows under the Indenture, including the amounts to be deposited in the collection account or any reserve fund created pursuant to the Indenture, to support payments of principal and interest on the Bonds.

6. The interests of the Bondholders will not be compromised or impaired by the ability of the Applicant to sell its residual interests in the Bonds of any Series, and there will not be a conflict of interest between the Bondholders and the holders of the residual interests in the Bonds of any Series for several reasons: (a) The collateral which initially will be deposited with the Trustee and will be pledged to secure the Bonds will not be speculative in nature because it will consist solely of GNMA Certificates, FNMA Certificates or FHLMC Certificates, which Mortgage Certificates are guaranteed as to timely payment of interest and timely or ultimate payment of principal by each respective agency; (b) the Bonds will only be issued provided an independent nationally recognized statistical rating agency has rated such Bonds in one of the two highest rating categories, which by definition means that the capacity of the Applicant to repay principal and interest on the Bonds is extremely strong; (c) the Indenture under which the Bonds will be issued subjects the collateral pledged to secure the Bonds, all income distributions thereon and all proceeds from a conversion, voluntary or involuntary, of any such collateral to a first priority perfected security interest in the name of the Trustee on behalf of the Bondholders; and (d) the owners of the residual interests in the Bonds of any Series will be entitled to receive current distributions representing the residual payments on the collateral securing such Series from the Applicant, which distributions are analogous to dividends payable to a shareholder of a corporate issuer of bonds. Furthermore, if the Applicant does not elect that the Bonds of a Series be treated as a REMIC under the Internal Revenue Code of 1986, the owners of the residual interests in the Series of Bonds will be liable for the expenses, taxes and other liabilities incurred with respect to such Series of Bonds (other than the principal and interest on the Bonds) to the extent not previously paid from the trust estate. The identity of the owners of the residual interests in the Bonds of any Series, however, will not alter in any way the payments made to the Bondholders, which payments are governed by an Indenture which will meet the requirements of the Trust Indenture Act of 1939.

7. Except to the extent permitted by the limited right to substitute collateral, it will not be possible for the owners of the residual interests in the Bonds of any Series to alter the collateral initially deposited with the Trustee, and in no event will such right to substitute collateral result in a diminution in the value or quality of such collateral. Although it is possible that any collateral substituted for collateral initially deposited with the Trustee may have a different prepayment experience than the original collateral, the interests of the Bondholders will not be impaired because: (a) The prepayment experience of any collateral will be determined by market conditions beyond the control of the owners of the residual interests in the Bonds of any Series, which market conditions are likely to affect all Mortgage Certificates of similar payment terms and maturities in a similar fashion; and (b) the interests of the owners of the residual interests in the Bonds of any Series are not likely to be greatly different from those of the Bondholders with respect to collateral prepayment experience. Further, in the event the Applicant sells its residual interests in the Bonds of any Series there will usually be more than one owner of the residual interests, and, therefore, in that event, it appears less likely that the owners of the residual interests will be able to agree on any desired substitution of collateral than if there were a single owner who could unilaterally decide on the time and execution of the substitution.

8. The election by the Applicant that a Series of Bonds be treated as a REMIC will have no effect on the level of expenses that would be incurred in connection with the issuance of such Bonds. If the Applicant elects that a Series of Bonds be treated as a REMIC, the Applicant will provide for the payment of administrative fees and expenses incurred in connection with the issuance of the Bonds by one of the following methods or a combination of one or more of such methods: (a) A third party, whose credit is acceptable to the agency or agencies rating the Bonds, the Trustee, and the Applicant, will guaranty the payment of such fees and expenses; (b) one or more reserve funds will be established to provide for the payment of such fees and expenses, which amounts will be projected, assuming current inflation factor scenarios required by the independent agencies or agencies rating the Bonds, at the time of the issuance of the Bonds and the establishing of such reserve funds. The procedure used to calculate the anticipated level of fees.
The Bonds will be "mortgage related securities" within the meaning of section 3(a)(41) of the Securities Exchange Act of 1934, as amended. However, the collateral directly securing the Bonds will be limited to GNMA Certificates, FNMA Certificates and FHLMC Certificates.

3. If new mortgage collateral is substituted, the substitute collateral will: (a) Be of equal or better quality than the collateral replaced; (b) have similar payment terms and cash flow as the collateral replaced; (c) be insured or guaranteed to the same extent as the collateral replaced; and (d) meet the conditions set forth in paragraphs (2) and (4). In addition, new collateral may not be substituted for more than 40% of the aggregate face amount of the Mortgage Certificates initially pledged as mortgage collateral. In no event will any new mortgage be substituted for any substitute mortgage collateral.

4. All mortgage Certificates, funds, accounts or other collateral securing a Series of Bonds ("Collateral") will be held by the Trustee, or on behalf of the Trustee by an independent custodian. The Trustee, or the custodian may be an affiliate (as the term "affiliate" is defined in Rule 405 under the 1933 Act, 17 CFR 230.405) of the Applicant. The Trustee will be provided with a first priority perfected security or lien interest in and to all Collateral.

5. Each Series of Bonds will be rated in one of the two highest bond rating categories by at least one nationally recognized statistical rating agency that is not affiliated with the Applicant. The Bonds will be "redeemable securities" within the meaning of section 2(a)(32) of the 1940 Act.

6. No less often than annually, an independent public accountant will audit the books and records of the Applicant and, in addition, will report on whether the anticipated payments of principal and interest on the mortgage collateral continue to be adequate to pay the principal and interest on the Bonds in accordance with their terms. Upon completion, copies of the auditor's report(s) will be provided to the Trustee.

7. The Applicant will insure that the anticipated level of administrative fees and expenses will be more than adequately provided for regardless of which or all of the methods, summarized in the representations listed above (which methods may be used in combination), are selected to provide for the payment of such fees and expenses.

8. Each class of adjustable interest rate Bonds will have a set maximum interest rate (an interest rate cap).

9. At the time of the deposit of the Collateral with the Trustee, as well as during the life of the Bonds, the scheduled payments of principal and interest to be received by the Trustee on all Mortgage Certificates pledged to secure the Bonds, plus reinvestment income thereon, and funds, if any, pledged to secure the Bonds will be sufficient to make all payments of principal and interest on the Bonds then outstanding assuming the maximum interest rate on each class of adjustable interest rate Bonds. Such Collateral will be paid down as the mortgages underlying the Mortgage Certificates are repaid, but will not be released from the lien of the Indenture prior to payment of the Bonds.

In addition, the following representations regarding the residual interests (and more fully described in the application) will be express conditions to the requested order.

10. In the event the Applicant sells its residual interests in the Bonds of any Series, such sale will be to a limited number, in no event more than one hundred, of sophisticated institutional investors in transactions exempt from the registration requirements of the Securities Act of 1933 ("1933 Act") under section 4(2) thereof. Such institutional investors may include one or more banks, savings and loan associations, insurance companies, and pension plans or other investors that would have prior experience in making investments in mortgage related securities or real estate ("Eligible Institutions"). Each Eligible Institution will be required to represent that it is purchasing such residual interests for investment purposes and will be prohibited from transferring such residual interests if there would be more than one hundred owners of such residual interests as a result of such transfer.

11. No holder of a controlling interest in the Applicant (as the term "control" is defined in Rule 405 under the 1933 Act) will be affiliated with the custodian acting on behalf of the Trustee, or the rating agency rating the Bonds. None of the owners of the residual interests in the Bonds of any Series will be affiliated with the Trustee.

For the Commission, by the Division of Investment Management, pursuant to delegated authority.

Shirley E. Hollis,
Assistant Secretary.

[FR Doc. 87-8711 Filed 4-16-87; 8:45 am]

BILLING CODE 8010-01-M
DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Radio Technical Commission for Aeronautics (RTCA); Special Committee 156—Potential Interference to Aircraft Electronic Equipment From Devices Carried Aboard; Meeting

Pursuant to section 10(a)(2) of the Federal Advisory Committee Act (Pub. L. 92-463; 5 U.S.C. App. I), notice is hereby given of a meeting of RTCA Special Committee 156 on Potential Interference to Aircraft Electronic Equipment from Devices Carried Aboard to be held on May 11-13, 1987 in the RTCA Conference Room, One McPherson Square, 1425 K Street, NW., Suite 500, Washington, DC 20005; (202) 682-0285. Any member of the public may present a written statement to the committee at any time.

Issued in Washington, DC, on April 8, 1987.

Wendie F. Chapman,
Designated Officer.

DEPARTMENT OF THE TREASURY

Establishment of Exempt Organizations Advisory Group in Accordance With the Provision of the Federal Advisory Committee Act, Public Law 92-463, the Department of the Treasury Announces the Establishment of an Exempt Organizations Advisory Group

The objectives of the Group are to advise the Commissioner of Internal Revenue on current problems and issues affecting the administration of Internal Revenue Code provisions relating to organizations exempt from federal income tax and described in section 501(c) of the Code.

The Group's duties are to consider and discuss a wide-range of issues relating to exempt organizations, primarily in areas of its choice but also in areas in which the Internal Revenue Service has specifically requested consideration. Reports and recommendations are solely advisory and are made directly to the Commissioner. The Commissioner initially has sole responsibility for any Internal Revenue Service action to be taken with respect to these recommendations.

It is has been determined that the establishment of the Exempt Organizations Group is in the public interest.

Jill E. Kent,
Deputy Assistant Secretary for Departmental Finance and Management.

BILING CODE: 4910-13-M

BILING CODE: 4810-25-M
CONSUMER PRODUCT SAFETY COMMISSION

TIME AND DATE: 10:00 a.m., Thursday, April 23, 1987

LOCATION: Room 556, Woodrow Towers, 5401 Westbard Avenue, Bethesda, Md.

STATUS: Closed to the Public.

MATTERS TO BE CONSIDERED: Compliance Status Report

The staff will brief the Commission on various compliance matters.

FOR A RECORDED MESSAGE CONTAINING THE LATEST AGENDA INFORMATION, CALL: 301-492-5709.

CONTACT PERSON FOR ADDITIONAL INFORMATION: Sheldon D. Butts, Office of the Secretary, 5401 Westbard Ave., Bethesda, Md. 20207, 301-492-6800.

Sheldon D. Butts,
Deputy Secretary.

EQUAL EMPLOYMENT OPPORTUNITY COMMISSION

"FEDERAL REGISTER" CITATION OF PREVIOUS ANNOUNCEMENT: 52 FR 11799, Friday, April 10, 1987

PREVIOUSLY ANNOUNCED TIME AND DATE OF MEETING: 2:00 p.m. (eastern time) Monday, April 20, 1987

CHANGE IN THE MEETING: The meeting has been cancelled.

CONTACT PERSON FOR MORE INFORMATION: Cynthia C. Matthews, Executive Officer, Executive Secretariat, (202) 634-8748.

Date: April 15, 1987.

Cynthia C. Matthews,
Executive Officer.

This Notice Issued April 15, 1987.

[FR Doc. 87-8801 Filed 4-15-87; 3:07 pm]
BILLING CODE 6155-01-M

FEDERAL COMMUNICATIONS COMMISSION

April 9, 1987.

The Federal Communications Commission will hold an Open Meeting on the subjects listed below on Thursday, April 16, 1987 which is scheduled to commence at 9:30 a.m., in Room 856, at 1919 M Street, NW., Washington, DC.

Agenda, Item No., and Subject

General—1—Title: Development and Implementation of a Public Safety National Plan and Amendment of Part 90 to Establish Service Rules and Technical Standards for Use of the 821-824/866-869 MHz Bands by the Public Safety Services. Summary: In this proceeding, the Commission considers a Notice of Proposed Rule Making setting forth proposed policies and requirements for a National Plan to address use of the 821-824/866-869 MHz bands by the public safety services.

Mass Media—1—Title: Amendment of §§ 73.1125 and 73.1130 of the Commission's Rules, the Main Studio and Program Origination Rules for Radio and Television Broadcast Stations. Summary: The Commission will consider whether to adopt changes to the Main Studio and Program Origination rules.


Mass Media—3—Title: Complaints Against Pacifica Foundation, Inc., Licensee of Station KPFK-FM, Los Angeles, CA, Regarding Allegedly Obscene or Indecent Broadcasts. Subject: The Commission will consider what, if any, action should be taken as a result of complaints received by the Commission alleging that KPFK-FM aired programming in violation of 18 United States Code section 1404.

Mass Media—4—Title: Complaints Against Infinity Broadcasting Corporation of Pennsylvania, Licensee of Station WYSP-FM, Philadelphia, PA, Regarding Allegedly Obscene or Indecent Broadcasts. Subject: The Commission will consider what, if any, action should be taken as a result of complaints received by the Commission alleging that KPFK-FM aired programming in violation of 18 United States Code section 1404.

Mass Media—5—Title: Control Exercised by The Regents of the University of California (Licensee) over Radio Station KCBS-FM, Santa Barbara, CA. Summary: The Commission will consider what action, if any, should be taken as a result of complaints received alleging that KCBS-FM aired programming in violation of 18 U.S.C. section 1404.

General—2—Title: Application for Review in the Hollywood, California Amateur Proceeding (FR Docket Nos. 82-302 and 81-303). Subject: The Commission will consider whether to review the Decision of the Review Board, FCC 83R-4, involving

CONSUMER PRODUCT SAFETY COMMISSION

TIME AND DATE: 10:00 a.m., Thursday, April 23, 1987

LOCATION: Room 556, Woodrow Towers, 5401 Westbard Avenue, Bethesda, Md.

STATUS: Closed to the Public.

MATTERS TO BE CONSIDERED: Compliance Status Report

The staff will brief the Commission on various compliance matters.

FOR A RECORDED MESSAGE CONTAINING THE LATEST AGENDA INFORMATION, CALL: 301-492-5709.

CONTACT PERSON FOR ADDITIONAL INFORMATION: Sheldon D. Butts, Office of the Secretary, 5401 Westbard Ave., Bethesda, Md. 20207, 301-492-6800.

Sheldon D. Butts,
Deputy Secretary.

EQUAL EMPLOYMENT OPPORTUNITY COMMISSION

"FEDERAL REGISTER" CITATION OF PREVIOUS ANNOUNCEMENT: 52 FR 11799, Friday, April 10, 1987

PREVIOUSLY ANNOUNCED TIME AND DATE OF MEETING: 2:00 p.m. (eastern time) Monday, April 20, 1987

CHANGE IN THE MEETING: The meeting has been cancelled.

CONTACT PERSON FOR MORE INFORMATION: Cynthia C. Matthews, Executive Officer, Executive Secretariat, (202) 634-8748.

Date: April 15, 1987.

Cynthia C. Matthews,
Executive Officer.

This Notice Issued April 15, 1987.

[FR Doc. 87-8801 Filed 4-15-87; 3:07 pm]
BILLING CODE 6155-01-M

FEDERAL COMMUNICATIONS COMMISSION

April 9, 1987.

The Federal Communications Commission will hold an Open Meeting on the subjects listed below on Thursday, April 16, 1987 which is scheduled to commence at 9:30 a.m., in Room 856, at 1919 M Street, NW., Washington, DC.

Agenda, Item No., and Subject

General—1—Title: Development and Implementation of a Public Safety National Plan and Amendment of Part 90 to Establish Service Rules and Technical Standards for Use of the 821-824/866-869 MHz Bands by the Public Safety Services. Summary: In this proceeding, the Commission considers a Notice of Proposed Rule Making setting forth proposed policies and requirements for a National Plan to address use of the 821-824/866-869 MHz bands by the public safety services.

Mass Media—1—Title: Amendment of §§ 73.1125 and 73.1130 of the Commission's Rules, the Main Studio and Program Origination Rules for Radio and Television Broadcast Stations. Summary: The Commission will consider whether to adopt changes to the Main Studio and Program Origination rules.


Mass Media—3—Title: Complaints Against Pacifica Foundation, Inc., Licensee of Station KPFK-FM, Los Angeles, CA, Regarding Allegedly Obscene or Indecent Broadcasts. Subject: The Commission will consider what, if any, action should be taken as a result of complaints received by the Commission alleging that KPFK-FM aired programming in violation of 18 United States Code section 1404.

Mass Media—4—Title: Complaints Against Infinity Broadcasting Corporation of Pennsylvania, Licensee of Station WYSP-FM, Philadelphia, PA, Regarding Allegedly Obscene or Indecent Broadcasts. Subject: The Commission will consider what, if any, action should be taken as a result of complaints received by the Commission alleging that KPFK-FM aired programming in violation of 18 United States Code section 1404.

Mass Media—5—Title: Control Exercised by The Regents of the University of California (Licensee) over Radio Station KCBS-FM, Santa Barbara, CA. Summary: The Commission will consider what action, if any, should be taken as a result of complaints received alleging that KCBS-FM aired programming in violation of 18 U.S.C. section 1404.

General—2—Title: Application for Review in the Hollywood, California Amateur Proceeding (FR Docket Nos. 82-302 and 81-303). Subject: The Commission will consider whether to review the Decision of the Review Board, FCC 83R-4, involving...
the use of indecent language on the amateur service.

General—3—Title: Memorandum Opinion, Declaratory Ruling and Order in General Docket No. 83-3989. Summary: The Commission will consider a Petition for Declaratory Ruling filed by Multipoint Distribution Systems, Inc. asking for clarification on the issue of whether MDS licenses are required under 47 CFR 21.920(b)(1), or any other Commission regulation or policy or the Communications Act, to allow their facilities to be used to transmit obscene or otherwise unlawful material.


This meeting may be continued the following work day to allow the Commission to complete appropriate action.

Additional information concerning this meeting may be obtained from Sarah Lawrence, Office of Congressional and Public Affairs, telephone number (202) 632-5050.

Federal Communications Commission.

William J. Tencarco,
Secretary.

[FR Doc. 87-8752 Filed 4-15-87; 10:55 am]
BILLING CODE 6712-01-M

FEDERAL ELECTION COMMISSION

Cancellation of Public Hearing

DATE AND TIME: Wednesday, April 22, 1987 10:00 a.m.

The Public Hearing on the Proposed Delegate Regulations has been cancelled.

DATE AND TIME: Wednesday, April 22, 1987 10:00 a.m.

PLACE: 999 E Street, NW., Washington, DC.

STATUS: This meeting will be open to the public.

ITEMS TO BE DISCUSSED:

Compliance matters pursuant to 2 U.S.C. § 437g.

Audits conducted pursuant to 2 U.S.C. § 437g, § 438(b), and Title 26, U.S.C.

Matters concerning participation in civil actions or proceedings or arbitration.

Internal personnel rules and procedures or matters affecting a particular employee.

DATE AND TIME: Thursday, April 23, 1987 10:00 a.m.

PLACE: 999 E Street, NW., Washington, DC (Ninth Floor).

STATUS: This meeting will be open to the public.

MATTERS TO BE CONSIDERED:

Setting of Dates for Future Meetings.

Correction and Approval of Minutes.

Eligibility for Candidates to Receive Presidential Matching Funds.

Final Audit Report—Reagan-Bush '84 General Election Committee; Reagan-Bush '84 Compliance Fund.

Financial Control and Compliance Manual for Presidential Primary Candidates Receiving Public Financing.

Draft Advisory Opinion 1980-42 (Reconsideration)—Vigo G. Nielsen, Jr. on behalf of Dart & Kraft, Inc.


Notice of Availability on Petition for Rulemaking filed by the National Right to Work Committee (NRWC).

Updated Status of Regulations Projects.

Routine Administrative Matters.

PERSON TO CONTACT FOR INFORMATION:

Mr. Fred Eliland, Information Officer, Telephone: 202-376-3155.

Marjono W. Emmons,
Secretary of the Commission.

[FR Doc. 87-8782 Filed 4-15-87; 2:48 pm]
BILLING CODE 6715-01-M

FEDERAL RESERVE SYSTEM BOARD OF GOVERNORS

"FEDERAL REGISTER" CITATION OF PREVIOUS ANNOUNCEMENT: 52 FR 11796, April 15, 1987

PREVIOUSLY ANNOUNCED TIME AND DATE OF THE MEETING: 10:00 a.m., Wednesday, April 15, 1987

CHANGES IN THE MEETING: Deletion of the following open item(s) from the agenda:

Publication for comment of proposed revisions to the Board's Regulation F (Securities of State Member Banks).

CONTACT PERSON FOR MORE INFORMATION:

Mr. Joseph R. Coyne, Assistant to the Board; (202) 452-3204.

DATED: April 15, 1987

James McAfee,
Associate Secretary of the Board.

[FR Doc. 87-8759 Filed 4-15-87; 11:36 am]
BILLING CODE 6101-01-M

FEDERAL RESERVE SYSTEM BOARD OF GOVERNORS

TIME AND DATE: 10:00 a.m., Wednesday, April 22, 1987

PLACE: Marriner S. Eccles Federal Reserve Board Building, C Street entrance between 20th and 21st Streets, NW., Washington, DC 20551.

STATUS: Open.

MATTERS TO BE CONSIDERED:

Summary Agenda

Because of their routine nature, no substantive discussion of the following items is anticipated. These matters will be voted on without discussion unless a member of the Board requests that an item be moved to the discussion agenda.


2. Proposal to extend, without revision, the Mortgage Loan Disclosure Statement (FR HMDA-1).

Discussion Agenda

3. Proposed revisions to the Board's Rules Regarding Availability of Information.

4. Any items carried forward from a previously announced meeting.

Note—This meeting will be recorded for the benefit of those unable to attend.

Cassettes will be available for listening in the Board's Freedom of Information Office, and copies may be ordered for $5 per cassette by calling (202) 452-3694 or by writing to:


CONTACT PERSON FOR MORE INFORMATION:

Mr. Joseph R. Coyne, Assistant to the Board; (202) 452-3204.
James McAfee,
Associate Secretary of the Board.
[FR Doc. 87-8760 Filed 4-15-87; 11:36 am]
BILLING CODE 6210-01-M

FEDERAL RESERVE SYSTEM, BOARD OF GOVERNORS

TIME AND DATE: Approximately 10:30 a.m., Wednesday, April 22, 1987 following a recess at the conclusion of the open meeting.
PLACE: Marriner S. Eccles Federal Reserve Board Building, C Street entrance between 20th and 21st Streets, Washington, DC 20551.
STATUS: Closed.

MATTERS TO BE CONSIDERED:
1. Personnel actions (appointments, promotions, assignments, reassignments, and salary actions) involving individual Federal Reserve System employees.
2. Any items carried forward from a previously announced meeting.

CONTACT PERSON FOR MORE INFORMATION: Mr. Joseph R. Coyne, Assistant to the Board; (202) 452-3204. You may call (202) 452-3207 beginning at approximately 5 p.m. two business days before this meeting, for a recorded announcement of bank and bank holding company applications scheduled for the meeting.

James McAfee,
Associate Secretary of the Board.
[FR Doc. 87-8761 Filed 4-15-87; 11:36 am]
BILLING CODE 6210-01-M

NATIONAL LABOR RELATIONS BOARD

TIME AND DATE: 10:00 a.m., Wednesday 15 April 1987
PLACE: Board Conference Room, Sixth Floor, 1717 Pennsylvania Avenue, NW.
STATUS: Closed to public observation pursuant to 5 U.S.C. 552(b)(2) (internal personnel Rules and practices) and (c)(6) (personal information where disclosure would constitute a clearly unwarranted invasion of personal privacy).

MATTERS TO BE CONSIDERED:
Presidential Rank Awards.

CONTACT PERSON FOR MORE INFORMATION: John C. Truesdale, Executive Secretary, Washington, DC 20570, Telephone: (202) 254-9430.

John C. Truesdale,
Executive Secretary, National Labor Relations Board.
[FR Doc. 87-8776 Filed 4-15-87; 1:00 pm]
BILLING CODE 7545-01-M

TENNESSEE VALLEY AUTHORITY

Meeting No. 1394
TIME AND DATE: 2 p.m. (EDT), Tuesday, April 21, 1987
PLACE: Chattanooga Office Complex, Missionary Ridge Place, Auditorium, 1101 Market Street, Chattanooga, Tennessee.
STATUS: Open.

Agenda

Action Items
A. Budget and Financing
1. Modification of Fiscal Year 1987 Capital Budget Financed from Power Proceedings and Borrowings: (1) Additional Funding—Modify SCRAM Discharge Volume at Browns Ferry Nuclear Plant; (2) Additional Funding—Increase Control Bay Heating and Vent Air-Conditioning System at Browns Ferry Nuclear Plant; (3) Additional Funding—Incore Thermocouple Upgrade Unit 1 at Watts Bar Nuclear Plant; (4) Decreased Funding—Upgrade Ion Chromatographs at Browns Ferry Nuclear Plant; and (5) Deferred Funding—Low-Level Radwaste Facility at Watts Bar Nuclear Plant.
B. Purchase Awards
C. Power Items
1. Agreement with Nashville and Eastern Railroad Authority for Continuation of Rail Service to TVA’s Wilson 550-kV Substation in Wilson County, Tennessee.
D. Personnel Items
1. Revised Pay Plan and Salary Schedule for Certain Management and Specialist Schedule Employees.

D4. Supplement No. 4 to Personal Services Contract No. TV-89786A with Associated Project Analysts, Los Gatos, California, for Assistance in the Development and Documentation for Nuclear Performance Plans for Sequoyah, Watts Bar, and Browns Ferry Nuclear Plants, Requested by Office of Nuclear Power.

F. Real Property Transactions

F—Unclassified

CONTACT PERSON FOR MORE INFORMATION: Craven H. Crowell, Jr., Director of Information, or a member of his staff can respond to requests for information about this meeting. Call (615) 632-8000, Knoxville, Tennessee Information is also available at TVA’s Washington Office (202) 245-0101.

W.F. Willis,
General Manager.
[FR Doc. 87-8722 Filed 4-15-87; 9:00 am]
BILLING CODE 6130-01-M
Corrections

DEPARTMENT OF THE INTERIOR

BILLING CODE 1506-01-D

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

CORR-118-07-4212-17; GP7-147

Public Lands, Establishment of Camping Stay Limit for Campgrounds and Undeveloped Public Lands, Medford District, OR

Correction

In notice document 87-6967 appearing on page 10268 in the issue of Tuesday, March 31, 1987 the subject heading is corrected to read as set forth above.

BILLING CODE 1505-01-D

SELECTIVE SERVICE SYSTEM

32 CFR Part 1630

Registrant Processing

Correction

In rule document 87-6126 beginning on page 8898 in the issue of Friday, March 20, 1987 make the following correction:

§ 1630.16 [Corrected]

On page 8891, in the first column, in § 1630.16(b) in the 14th line "with" should read "without"

BILLING CODE 1505-01-D

DEPARTMENT OF THE TREASURY

Office of the Secretary

31 CFR Part 103

Amendments to Implementing Regulations Under the Bank Secrecy Act

Correction

In rule document 87-7797 beginning on page 11438 in the issue of Wednesday, April 8, 1987 make the following corrections:

1. On page 11436, in the third column, in the third complete paragraph, in the seventh line, "undertakes" should read "undertakes"

2. On page 11437 in the second column, in paragraph 5, in the second line, "transition" should read "transaction"

§ 103.11 [Corrected]

3. On page 11441, in the second column, in § 103.11(c), in the third line, insert "who" before "holds"

4. On the same page, in the third column, in § 103.11(j)(4), in the third line, insert "in" before "enterprise"

§ 103.24 [Corrected]

5. On page 11443, in the second column, the section number in the heading for § 103.24 was incorrect.

§ 103.26 [Corrected]

6. On page 11443, in the second column, in § 103.26(a)(1), in the fourth line, "responsible" should read "reportable" and in the same column, in § 103.26(b)(1), in the third line, "departure" was misspelled.

§ 103.27 [Corrected]

7. On page 11444, in § 103.27 in the first column, in the 18th line, "care" should read "card"

8. On the same page, in the second column, in amendatory instruction 12, in the second line, insert "of" after "(2)"

§ 103.47 [Corrected]

9. On page 11446, in the second column, in § 103.47(e), in the first line, "of violation" should read "violation of"

BILLING CODE 1505-01-D
Part II

Environmental Protection Agency

40 CFR Parts 280 and 281
Underground Storage Tanks; Proposed Rules
ENRONNMENTAL PROTECTION
AGENCY,

40 CFR Part 280

[FR-3154-6]

Underground Storage Tanks: Technical Requirements

AGENCY: Environmental Protection Agency.

ACTION: Proposed rule.

SUMMARY: The Environmental Protection Agency (EPA) today proposes regulations for underground storage tanks containing petroleum or substances defined as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended (except hazardous wastes regulated under Subtitle C of the Resource Conservation and Recovery Act). Under Subtitle I, Section 903 of the Resource Conservation and Recovery Act, as amended (RCRA), EPA must establish requirements for leak detection, leak prevention, financial responsibility and corrective action for all underground storage tanks containing regulated substances.

Today's proposal sets forth, and solicits comment on, proposed requirements that would satisfy the mandates of RCRA as amended. (RCRA), Resource Conservation and Recovery Act, Subtitle C.

DATES: Comments must be received on or before June 16, 1987. Public hearings will be held on this rulemaking in conjunction with public hearings on the proposed UST State Program Approval Requirements, published elsewhere in today's Federal Register. Public hearings will be held from 9:30 A.M. to 5:00 P.M., unless concluded earlier, and will be carried over to a second day if necessary to allow commenters to speak who have requested to testify. These hearings are scheduled as follows:

1. May 28, 1987 9:30 A.M. to 5:00 P.M., Washington, DC.
2. June 1, 1987 9:30 A.M. to 5:00 P.M., Dallas, Texas.

Requests to present oral testimony must be submitted in writing and received at least one week prior to the scheduled hearing date.

ADDRESSES: Send comments to Docket Clerk, Office of Underground Storage Tanks (WH-862A), Docket No. UST 2-1, U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460. Requests to testify at a hearing may be mailed to: Gerri Wyer, Hearings Coordinator, Office of Underground Storage Tanks (WH-862A), U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460 (toll free) or (202) 424-9346 or in Washington, DC.

Hearings will be held at the following locations:

1. Washington, DC—The Westin Hotel, 2401 M Street NW., Washington, DC 20037
2. Dallas—The Registry Hotel, 15201 Dallas Parkway, Dallas, Texas 75248
3. San Francisco—The Miyako Hotel, 1625 Post Street, San Francisco, California 94015.

FOR FURTHER INFORMATION CONTACT: RCRA/SUPERFUND Hotline, 1-(800) 424-9346; or in Washington, DC, 2-(202) 382-3000.

SUPPLEMENTARY INFORMATION: The contents of today's Preamble are listed in the following outline:

I. Authority
II. Background
A. The Law: Subtitle I of RCRA
B. Description of the Underground Storage Tanks (UST Systems) to be Regulated
1. Number of Tanks and Facilities
2. Types of Tanks
3. Age of Tanks
C. General Status of Existing Industry, State and Local Practices
III. The Scope and Nature of the Problem
A. Current Estimates of Leaking UST Systems
1. EPA Studies
2. Some Local Government Experiences
3. Industry Estimates
A. The Nature and Extent of the Problem
B. Major Causes of Releases
1. Corrosion
2. Installation Failure
3. Piping Failure
4. Spills/Overfills
C. Technical Options Available to Address Causes of Releases
1. Corrosion Protection
2. Design and Construction Standards
3. Spill and Overfill Equipment and Practices
4. Inspections
5. Operation and Maintenance
6. Release Detection Requirements
IV. Important Influences on Today's Proposal
A. Recommended Industry Practices and National Consensus Codes
B. Current Status and Future Role of State and Local UST System Programs
C. Major Trends in the Industry
D. Small Business Impacts
V. Today's Proposal
A. Summary of Today's Proposal
B. Considerations Underlying EPA's Proposed Approach
C. Options Considered for New and Existing UST Systems
1. New Petroleum UST Systems
2. Existing Petroleum UST Systems
3. New and Existing Hazardous Substance UST Systems
D. Options Considered for Corrective Actions
1. Petroleum UST Systems
2. Hazardous Substances UST Systems
E. Two-Tiered Regulatory Scheme for Petroleum Tanks: Basis for Determining Class
VI. Analysis of Today's Proposed Rule
A. Program Scope
1. Applicability
2. Exclusion for Tanks Regulated Under Subtitle C
3. Deferral of Regulation
4. Definitions
B. Design, Installation, and Notification Requirements
1. Performance Standards for New UST Systems
2. Implementation Schedules for Upgrading of Existing UST Systems
3. Notification Requirements
C. General Operating Requirements
1. Spill and Overfill Controls
2. Operation and Maintenance of Corrosion Protection
3. Compatibility
4. Repairs
5. Recordkeeping
D. Release Detection
1. General Strategy
2. General Requirements for All UST Systems
3. Requirements for New UST Systems
4. Secondary Containment for New Hazardous Substance UST Systems
5. Additional Requirements for Piping at New UST Systems
6. Requirements for Existing UST Systems
E. Release Detection Recordkeeping
F. Corrective Action Requirements for Petroleum UST Systems
1. Stage I: Immediate Corrective Action
2. Stage II: Longer-Term Corrective Action
3. Responsibilities of Implementing Agencies
4. Enforcement
G. Corrective Action Requirements for Hazardous Substance UST Systems
1. Stage I: Immediate Corrective Action
2. Stage II: Longer-Term Corrective Action
3. Responsibilities of Implementing Agencies
4. Enforcement
H. Out-Of-Service UST Systems and Closure
VII. Relationship to Other Aspects of the UST System Program
A. Interim Prohibition
B. Notification
C. Leaking Underground Storage Tank Trust Fund
D. Exempted Tank Studies
VIII. Relationship to Other Agency Programs
A. CERCLA
B. Hazardous Waste Tank Program
C. Used Oil Regulations
D. Stage II Vapor Recovery Program
E. SPCC
F. DOE High-Level Radioactive Waste Program
IX. Economic and Regulatory Impacts
A. Regulatory Impact Analysis --
B. Regulatory Flexibility Act
C. Paperwork Reduction Act
X. Review of Supporting Documents and
   Request for Public Comment
XI. Schedule of Public Hearings
XII. List of Subjects in 40 CFR Part 280

I. Authority

These regulations are issued under the authority of Sections 2002, 9001, 9002, 9003, 9004, 9005, 9006, 9007 and 9008 of the Solid Waste Disposal Act of 1979, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6912, 6991(a), 6991(b), 6991(c), 6991(d), 6991(e), 6991(f), 6991(g), 6991(h)).

II. BACKGROUND

A. The Law: Subtitle I of RCRA

The Hazardous and Solid Waste Amendments of 1984, Public Law 98-616, were signed by the President on November 8, 1984. These Amendments extend and strengthen the provisions of the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act (RCRA) of 1976. One major portion of this new legislation, Subtitle I, provides for the development and implementation of a comprehensive regulatory program for “underground storage tanks.”

Subtitle I defines “underground storage tank” as “any one or combination of tanks (including underground pipes connected thereto) which is used to contain an accumulation of regulated substances, and the volume of which (including the volume of the underground pipes connected thereto) is 10 percent or more beneath the surface of the ground.”

Throughout this Preamble and proposed rule the use of the term “underground storage tanks,” “USTs,” and “UST systems” are meant to include both the underground storage tank vessel and the underground piping connected to it. The use of the word “tank” pertains only to the storage tank vessel itself. “Regulated substances” are defined as either petroleum or substances defined as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA) (except hazardous wastes regulated under Subtitle C of RCRA).

Subtitle I excludes the following from the definition of underground storage tanks:
- Farm or residential tanks of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes;
- Tanks used for storing heating oil for consumptive use on the premises where stored;
- Septic tanks;
- Pipeline facilities (including gathering lines) regulated under (a) the Natural Gas Pipeline Safety Act of 1968; (b) the Hazardous Liquid Pipeline Act of 1978; or (c) which are interstate pipeline facilities regulated under state laws comparable to the provisions of the laws referred to in (a) and (b) above;
- Surface impoundments, pits, ponds, or lagoons;
- Storm water or wastewater collection systems;
- Flow-through process tanks;
- Liquid traps or associated gathering lines directly related to oil or gas production and gathering operations; and
- Storage tanks situated in an underground area (such as a basement, cellar, mineworking, drift, shaft, or tunnel) if the tank is situated upon or above the surface of the floor.

Subtitle I contains several major provisions for the regulation of UST systems. Section 9002 requirements under Section 9004 are UST system owners to notify states of the existence of their UST systems. These notification requirements were addressed in a Final Rule published by EPA (50 FR 46802, November 8, 1985). Section 9002, as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), also requires that states use the notifications they receive to compile tank inventories. Also, under federal grant agreements states are providing EPA with aggregated data from these notifications.

Under Section 9003 of Subtitle I, EPA must promulgate regulations applicable to all owners and operators of UST systems to protect human health and the environment. This section requires that EPA issue design, construction, installation, and compatibility standards for new tanks as well as requirements applicable to all tank owners and operators concerning leak detection, recordkeeping, reporting, closure, corrective action, and financial responsibility.

Section 9003(h) was recently added by the Superfund Amendments and Reauthorization Act of 1986 (SARA). This provision gives EPA (and states under cooperative agreements with EPA) authority to clean up releases from UST systems or to require their owners and operators to do so. It also establishes a trust fund to finance some of these activities.

Section 9004 permits EPA to authorize states to implement their own UST programs in lieu of the federal program if their requirements are “no less stringent” than EPA’s and provide for adequate enforcement.

Other provisions of Subtitle I pertain to definitions (Section 9001); entry, inspection, and information-gathering (Section 9005); enforcement (Section 9008); federal facilities (Section 9007); state authorities (Section 9008); and studies and reports to Congress required of EPA (Section 9009).

This Preamble and proposed rule pertain to the requirements mandated by Sections 9003(a) and (c)–(e).

Proposed financial responsibility requirements under Section 9003(a) and (d) and state program approval requirements under Section 9004 are proposed in other parts of today’s Federal Register.

Section 9003(c) requires that EPA establish minimum requirements for all UST systems: to maintain a leak detection system or comparable system designed to identify releases to protect human health and the environment; to maintain records of any such release detection system; to report releases and corrective action taken; to take corrective action in response to a release; and to close tanks to prevent future releases. Under Section 9003(e), EPA must also establish performance standards for new UST systems. At a minimum, these standards must include design, construction, installation, release detection, and compatibility standards.

Until UST system regulations for new tanks are promulgated, Section 9003(g) establishes an “Interim Prohibition” that allows installation of UST systems after May 8, 1985 only if the UST system 1) will prevent releases due to corrosion or structural failure for the operational life of the UST; 2) is cathodically protected against corrosion, constructed of noncorrodible material, or otherwise designed to prevent releases, and 3) is compatible with the substance to be stored. The law allows an exemption from the requirement of corrosion protection if an UST system is located at a site that has a soil resistivity measured at 12,000 ohms-cm or greater. These requirements will be replaced when final new tank standards under Section 9003(e) become effective. An interpretive rule concerning the Interim Prohibition was published on June 4, 1986 (51 FR 20418).

This Preamble will describe in detail the full range of requirements mandated by Sections 9003(a), (c)(1)–(5), and (e). A description of the UST system universe to be regulated by these requirements follows.
B. Description of the Underground Storage Tanks (UST Systems) To Be Regulated

1. Number of Tanks and Facilities

Today's proposed regulation will apply to an estimated 1.4 million UST systems owned or operated at over 500,000 facilities. EPA estimates that over 95 percent of the estimated 1.4 million UST systems are used to store petroleum. Among these petroleum UST systems, there is a fairly even split between the retail motor fuel sales industry (876,000 tanks) and a number of other industries primarily storing petroleum products for their own use (651,000 tanks). EPA estimates that about 4 percent of the total number of UST systems affected by this proposal contain hazardous substances (54,000 tanks).

The following table displays the number of tanks and facilities appearing in various industry sectors.

<table>
<thead>
<tr>
<th>Industry sector</th>
<th>Number of UST systems</th>
<th>Number of facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>RETAIL MOTOR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FUELS</td>
<td>(676,000)</td>
<td>(193,000)</td>
</tr>
<tr>
<td>Refiners</td>
<td>164,000</td>
<td>47,000</td>
</tr>
<tr>
<td>Jobbers</td>
<td>161,000</td>
<td>46,000</td>
</tr>
<tr>
<td>Convenience</td>
<td>32,000</td>
<td>15,000</td>
</tr>
<tr>
<td>Stores</td>
<td>32,000</td>
<td>15,000</td>
</tr>
<tr>
<td>Independent</td>
<td>18,000</td>
<td>5,000</td>
</tr>
<tr>
<td>Open Dealers</td>
<td>821,000</td>
<td>80,000</td>
</tr>
<tr>
<td>PETROLEUM</td>
<td>(651,000)</td>
<td>(268,000)</td>
</tr>
<tr>
<td>STORAGE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>66,000</td>
<td>54,000</td>
</tr>
<tr>
<td>Mining</td>
<td>14,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Construction</td>
<td>42,000</td>
<td>21,000</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>75,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Transportation</td>
<td>59,000</td>
<td>25,000</td>
</tr>
<tr>
<td>&amp; Utilities</td>
<td>39,000</td>
<td>19,000</td>
</tr>
<tr>
<td>Wholesale</td>
<td>135,000</td>
<td>65,000</td>
</tr>
<tr>
<td>&amp; Retail Trade</td>
<td>54,000</td>
<td>26,000</td>
</tr>
<tr>
<td>Services</td>
<td>54,000</td>
<td>26,000</td>
</tr>
<tr>
<td>Government</td>
<td>49,000</td>
<td>6,000</td>
</tr>
<tr>
<td>(Military)</td>
<td>49,000</td>
<td>6,000</td>
</tr>
<tr>
<td>(Non-Military)</td>
<td>98,000</td>
<td>46,000</td>
</tr>
<tr>
<td>CHEMICAL</td>
<td>(54,000)</td>
<td>(21,000)</td>
</tr>
<tr>
<td>STORAGE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manufacturing</td>
<td>27,000</td>
<td>8,000</td>
</tr>
<tr>
<td>Wholesale</td>
<td>14,000</td>
<td>6,000</td>
</tr>
<tr>
<td>&amp; Retail Trade</td>
<td>14,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Services</td>
<td>3,000</td>
<td>1,500</td>
</tr>
<tr>
<td>Other Private</td>
<td>8,000</td>
<td>3,000</td>
</tr>
<tr>
<td>Sectors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td>2,000</td>
<td>500</td>
</tr>
<tr>
<td>Government</td>
<td>2,000</td>
<td>2,000</td>
</tr>
<tr>
<td>State &amp; Local</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td>2,000</td>
<td>2,000</td>
</tr>
</tbody>
</table>

Totals .......... $1,381,000 $512,000

1 These estimates do not include potentially millions of unusual or small UST systems discussed in Section VI.A. of this Preamble. For example, there are approximately 750,000 hydraulic lift fluid USTs.

2. Types of UST Systems

UST systems generally consist of the following:

- Steel UST systems not protected from corrosion ("bare steel tanks");
- Steel UST systems protected with a noncorrodible coating;
- Steel UST systems with cathodic protection;
- Steel UST systems with a noncorrodible coating and cathodic protection;
- UST systems made totally of noncorrodible materials; and
- UST systems, made of noncorrodible materials or protected steel, using secondary containment systems.

Steel UST systems can be protected against corrosion by applying a coating of noncorrodible material, such as fiberglass-reinforced plastic (FRP), or by using cathodic protection (described below in Section VI.A.1.). Tanks constructed of noncorrodible materials are usually made of fiberglass-reinforced plastic (FRP). Secondary containment systems are designed to restrict leaks temporarily to a containment area where they can be rapidly detected by leak detection monitors. There are three main types of secondary containment: double-walled tanks, pit lining systems, and vaults.

Of the estimated 1.4 million existing UST systems, approximately 80 percent are believed to be constructed of unprotected steel. As a result of the Interim Prohibition and installation trends in the petroleum industry, however, the number of bare steel UST systems being installed today has significantly declined. For example, the Steel Tank Institute recently reported a dramatic rise in the production and sale of coated and cathodically-protected steel tanks in the United States. They indicate that the cumulative number of STIPv38 tanks installed nationwide since the late 1980s was doubled in one year (1986) from approximately 35,000 to over 70,000 tanks. STI members further estimate that in 1987 approximately 90 percent of the steel tanks they produce will be coated and cathodically protected. (Some manufacturers are now refusing to sell bare steel tanks.)

Preliminary data from several state UST programs (for example, Florida, New York, California, Kansas, and North Carolina) corroborate this trend away from bare steel tanks. New tanks are reported most commonly to be made out of coated and cathodically-protected steel, and fiberglass reinforced plastic (FRP), and FRP-clad steel.

3. Age of Tanks

Most existing UST systems have already been in the ground for more than ten years. A recent EPA study, Underground Motor Fuel Storage Tanks: A National Survey, found that approximately one third of the existing motor fuel storage tanks are over 20 years old or of unknown age. The survey reported a mean tank age of 12 years for large facilities and 14 years for smaller facilities.

C. General Status of Existing Industry, State, and Local Practices

A number of states and localities have adopted requirements applicable to UST systems. These requirements are diverse and vary widely in stringency. Because leaking petroleum UST systems have led to fires and explosions, early state and local UST regulations have focused on fire code authorities, primarily emphasizing concerns with immediate public safety. National consensus codes, such as the National Fire Prevention Association's NFPA 30 and 329, have been adopted by many state and local governments.

At least fourteen states have recently addressed the ground-water contamination and cleanup problems posed by leaking UST systems through comprehensive regulatory programs that attempt to control important aspects of proper UST system management. Several states, like California, New York and Florida, have established specific UST system regulations that include standards for new UST system design, construction and installation; closure, retrofitting, or repair of existing UST systems; release detection; and corrective action requirements.

Numerous non-regulatory initiatives in UST system management include existing recommended industry practices and state-of-the-art professional guidances. For example, the American Petroleum Institute, the Steel Tank Institute, Underwriters Laboratories, the National Association of Corrosion Engineers, and the American Society for Testing and Materials continue to provide benchmark standards for design and materials. Steel and fiberglass tank manufacturers also supply specifications for tank installation and maintenance.

It appears that the Interim Prohibition of Section 9003(g) reinforces current industry and regulatory trends. As previously mentioned, estimates provided to EPA from several representatives of tank manufacturers...
and state agencies indicate a sharply increasing trend towards corrosion-protected underground tank systems. The American Petroleum Institute conducted a survey of its membership and reported in December 1984 that 83 percent of the major and semi-major oil companies (which include a total of approximately 175,000 UST systems) have formal plans for scheduling tank replacements and upgrading. Most of these companies are installing single-walled FRP tanks.

Despite these positive trends, however, many other sectors of the retail motor fuel sales industry (e.g., many independent retail marketers) currently appear to have no clear plans to upgrade or replace their aging, corrosion-prone UST systems. The non-retail petroleum and hazardous substance tank sectors also appear to display a wide variety of responses to upgrading and replacement of tank systems. Also, most existing UST systems do not yet have release detection. However, this situation is seen to be rapidly changing in the several state or local communities that have recently enacted UST regulatory programs. All these programs have or are phasing in some type of release detection.

III. THE SCOPE AND NATURE OF THE PROBLEM

A. Current Estimates of Leaking UST Systems

1. EPA Studies

A display of the nature and national scope of the UST problem can be found in three EPA studies. First, in May 1985, EPA published Underground Motor Fuel Storage Tanks: A National Survey. In addition to providing data on tank types and ages (briefly referred to earlier in this Preamble), this survey documents the results of a methodical program of tank tightness testing. Using a statistical sample, the study estimates that 35 percent of non-farm UST systems storing motor fuel would prove non-tight under the conditions of a tank tightness test. However, the survey report acknowledges several caveats regarding the interpretation of this data. For example, failing a tank tightness test does not necessarily indicate the tank or piping is leaking under non-test conditions. Under normal operating conditions vent pipes and bung hole fittings of the tank do not come in contact with the substance stored in the tank and, therefore, cannot leak (however, they can leak whenever the tank is overfilled). In contrast, faulty piping that conveys the substance stored in the tank by the use of pressure pumps can potentially result in significant releases into the environment under normal operating conditions. The survey revealed, however, that most of the existing piping systems tested do not convey motor fuel using pressure pumping methods, but instead use suction methods. EPA believes suction methods are significantly less likely to result in large releases. (See Section VII.D.5. of today's Preamble for further discussion of pressure versus suction piping.)

This national survey underscores the difficulty in discovering the extent and cause of the UST "problem." Statistical analysis of the data collected could not identify any single explanatory variable—such as type of tank or type of material stored—that strongly correlated with the fact that an UST failed a tank tightness test, with one exception: UST systems 20 years old or older failed the test more often. For example, the survey results could not distinguish the extent of the non-tightness attributed to loose fittings on top of the tank or faulty vent pipes and other piping and equipment.

A second study, Summary of State Reports on Releases from Underground Storage Tanks, was published in August 1986. This study was based on information compiled by all 50 states concerning 12,444 reported UST release incidents that occurred between 1970 and 1984. Although it was not a statistically-based survey, this study represents the most comprehensive information pertaining to leaking UST systems currently available. The study found a continuously increasing number of release incidents reported over time. In 1980, about 1,000 release incidents were reported. By 1985, the number of releases reported annually had jumped to well over 2,500. This sharp increase may partly be the result of improvements in state reporting systems. As a result, the state release incidents study referred to above may be describing only a fraction of release incidents nationwide. The local incident study confirms a trend also documented by the state study: more release incidents are being reported each year. For example, there were over 60 percent more release incident reports registered locally in 1985 than in the previous year.

As with the earlier studies, the local release incidents survey revealed that no single variable (such as tank type or age) correlated strongly with the leaking UST systems. However, because most existing UST systems are made of bare steel, corrosion was identified as the chief cause of releases from existing UST systems. Of the tank systems reported to have releases, the distribution of their ages and types was comparable to the earlier studies. Unlike previous studies, however, the local incident survey provided more detailed information on the impact of releases to the environment. About 80 percent of the reported release incidents resulted in soil contamination of 0.5 acres or less. About half the release incidents reporting ground-water contamination impacted 0.5 acres or less of the aquifer to a depth of less than 20 feet. Also, this study identified a strong relationship between the year leak detection requirements became effective in these local jurisdictions and an increase in the number of leaks they reported.
2. Some Local Government Experiences

Data collected locally also provide an indication of the number of UST systems that are currently leaking. New York’s Suffolk County instituted tank testing requirements in 1980. The data from approximately 6,200 tightness tests required by the county’s Health Department from 1980-1986 reveal that 26 percent of the tank systems failed under the conditions of the test. When these failed systems were partially unearthed and investigated, the condition of non-tightness was discovered (by more than a 1 to 1 margin) to be primarily caused by loose fittings on top of the tank or faulty piping in need of repair or replacement. Interviews conducted in 1985 with county health officials and a major local tank installer disclosed to county health officials and a major local tank installer that the cumulative failure figures could have been much higher than reported, because many leaking tanks were voluntarily taken out of the ground after 1980 but before they could be tested under the county’s program requirements. Tank testing programs in Austin, Texas, and in San Diego, California, in which thousands of tank systems have been tested, corroborate the finding that most UST systems failing a tightness test do not appear to have leaks in the tanks, but rather loose fittings on top of the tanks and faulty piping in need of tightening or replacement.

A review of ground-water monitoring systems applied to tanks in Florida’s Dade County was cited to EPA by county health officials as revealing the presence of free-floating petroleum on the ground-water at approximately 10 percent of the sites where monitoring wells were installed on the top of the ground-water table. After further investigation at many of these sites, it was determined that these releases often resulted from an accumulation of spills and overfills that took place in the past.

3. Industry Estimates

The findings from some industry-sponsored studies have tended to suggest that there are very few leaking UST systems. The American Petroleum Institute conducted a survey of its membership over a three-year period ending in 1980 and had only 2,600 release incidents voluntarily reported by site operators. These incidents are not believed to be a significant fraction of the total number of release incidents occurring, and the report does not document the effect of releases on the environment. The survey indicated corrosion as the leading cause of leaks—over 60 percent of reported incidents.

A more recent study resulted from a merger of two companies that required the tightness testing of over 3,500 UST systems (letter to Mr. Ron Brand, Director, Office of Underground Storage Tanks, from Chevron, dated June 2, 1986). The report on this company-sponsored testing program notes that the facilities involved represented a typical cross-section of a major oil company’s service stations. Using current testing procedures, all tanks were given a tank tightness test and less than 10 percent failed the test. Of that group, after further investigation, less than 2 percent were reported to have actually leaked, but instead were primarily discovered to have loose fittings on top of the tank. Looked at from a facility-wide standpoint, however, this study suggests a wider impact on the environment than do the data from tightness testing of the specific tank systems. At 90 facilities, one observation well (not necessarily in the excavation area) disclosed the presence of released petroleum products pooled on top of the ground-water table. Although 56 of these facilities had passed the tank tightness test, observation wells disclosed the presence of leaked fuel on top of the ground-water. Thus, this study’s conservative figures show that releases from approximately 9 percent of these service stations (that is, 90 out of approximately 1,000 facilities) have had an adverse impact on adjacent ground-water. It is possible that many of these impacts may be the result of an accumulation of spills and overfills or earlier releases from subsequently repaired UST systems, and not from a currently leaking tank system.

4. The Nature and Extent of the Problem

In summary, the nation may be facing a pervasive threat to its ground-water from leaking UST systems. If even 10 percent of the nation’s gasoline service stations have leaked or are leaking (as one company-sponsored testing program of a typical cross-section of retail motor fuel outlets indicated), then releases to ground-water could exist at approximately 17,500 retail gasoline sites nationally. Many of these releases could be damaging ground-water resources and presenting threats to human health and safety. As stated earlier, retail motor fuel outlets account for only half of the UST systems addressed by today’s proposals. Therefore, the actual level of existing impacts to ground-water could be significantly greater than noted above.

Despite these study findings, major uncertainties still remain. For example, fewer cases of potable well contamination have been reported and documented than should be expected with the number of releases that appear to be occurring. EPA is uncertain whether biodegradation, attenuation, the characteristics of petroleum products or other factors combine with slow ground-water movement to eliminate the problem before potable ground-waters are affected; or perhaps some other factor accounts for the proportion of contaminated wells being reported. On the other hand, it may be only a matter of time before more impacts from these numerous suspected leaks become known.

More information on these and related issues regarding the exact magnitude of the problem, or potential problem, associated with underground tanks will become available over the next several years; particularly as the release detection requirements in several lead state UST programs are implemented more fully. The findings to date, however, are sufficient to demonstrate that leaking underground tanks may be a common occurrence throughout the nation. Significant impacts have occurred; in most cases the release is detected inadvertently, by sight or smell; and a variety of available control approaches that can be used to reduce the risk of damage to public health and the environment are not yet being implemented on a widespread basis. The following sections briefly describe the major causes of UST system releases; technical options for addressing releases; and current industry, state, and local attempts to resolve the problem.

B. Major Causes of Releases

There are four major causes of release incidents: corrosion; faulty installation; piping failure; and spills and overfills. These four causes are described in the following sections.

1. Corrosion

Corrosion is reported to be the major cause of leaks from bare steel UST systems. The EPA surveys described above found that 80 to 70 percent of leaks from existing underground storage tank systems are reported as caused by corrosion. Because a very large number of existing UST systems are constructed of steel that is unprotected from corrosion, corrosion is presently believed to be the cause of the largest number of releases in general.
Like the more publicly seen and understood phenomenon known as "rust," corrosion is a general description of what happens when hard, manufactured metal breaks down in the underground environment into its natural form as a soft ore. The multiple ways in which corrosion works underground make it a particular threat to bare steel UST systems. The speed and severity of corrosion depend on a number of factors, including soil conditions, ground water location, and tank or piping characteristics. Corrosion can occur over an entire surface or be localized at a few spots (point corrosion). When localized, unprotected metal can corrode very quickly.

Corrosion attacks unprotected steel UST systems mainly through galvanic corrosion. In this case, the bare steel tank system and its underground surroundings act like a battery. For example, part of an unprotected tank can become negatively charged and another part positively charged (or the bare steel tank and its connected piping can become differently charged, particularly if the piping is galvanized). Once a connection is made between these differently charged parts of the system, a full electric circuit is completed. Many factors can account for the slight differences in the charged parts, including even minute differences within the metal on the surface of the same bare tank or between the bare metal of a pipe's thread (or joint) and the pipe itself. Various soil conditions provide the connecting link to complete the electric circuit.

Once the electric circuit begins, the negatively charged part of the tank or piping—where the current exits—starts to deteriorate (sometimes very rapidly). As electric current passes through this part, the metal begins to turn into ore. Eventually holes are formed by this galvanic corrosion and the tank or piping leaks.

A variation of this problem occurs when the UST system is in the path of underground electric currents. For example, if a subway system or other power system operates near an unprotected UST system, stray current from that system can pass through the UST system. When stray electric current passes through an unprotected steel UST system, corrosion—like the galvanic corrosion described above—occurs in the area where the current leaves the tank or piping.

The rate at which this localized corrosion occurs is directly related to the intensity of the stray current. The larger the current, the faster the corrosion rate. Stray currents are often many times stronger than the currents in galvanic corrosion. Thus, stray current corrosion may occur over a wide surface area of a tank or pipe and at some distance from the power source.

Corrosion can be caused by many conditions and these conditions are almost always present when bare steel is placed underground. In addition, corrosion is generally a gradual process. Thus, the longer unprotected steel tanks or piping are in the ground, the more likely they will be subjected to the many conditions that promote corrosion.

2. Installation Failure

Another significant but less frequently reported cause of leaking UST systems is failure resulting from improper installation. EPA's local release incident study found about 25 percent of the release incident reports cited improper installation (often reported as "structural failure") as the cause of the release (Executive Summary of County/City Release Incidents, Draft 1988). Improper installation is a term that encompasses a variety of problems. According to industry reports and consensus codes, installation mistakes that can cause tanks or piping to leak include:

- Inadequate pit and trench design;
- Improper handling of a tank at a site;
- Improper tank bedding and placement;
- Poor or unsuitable backfill material and/or compaction procedure;
- Improper tank or piping depth;
- Inadequate anchoring in high ground-water table conditions; and

Improper installation of attachments, particularly the fittings on the piping.

The term "structural failure" was often used to describe a wide range of causes of tank releases. For example, the most common "structural failure" reported by state agencies resulted from vehicles colliding with gasoline pumps. Other reported causes of structural failure provided in EPA's State Release Incident Survey also point to accidents, or poor installation practices, rather than integral deficiencies in the tank or piping structure (such as improper anchoring of tanks or the rupture of tanks and piping caused by excessive external load due to vehicular traffic, backhoes, shovels, or snow plows).

3. Piping Failure

According to EPA's State Release Incident Survey, over 20 percent of reported releases from UST systems resulted from failure of underground piping. The same study identified piping as the location of over 50 percent of reported structural failure incidents.

Also, piping failures accounted for more of the largest release incidents than either tank or surface spills. Although this was not a statistically-based survey, the number and proportion of the incidents resulting from piping failures was an important finding. These figures underscore the necessity that today's proposed regulations for release prevention and release detection apply to the tank system's piping, as well as to the tanks themselves.

As noted in the sections above, piping is subject to the same harmful effects of corrosion and installation/structural failure that affect tank failures. As a result of its thinner walls, numerous connecting parts, and more vulnerable location nearer the ground surface, piping may be more susceptible to corrosion and installation/structural failure than tanks. More than half the piping structural failures were reported to occur in the supply line between the tank and the pump; however, a significant number of the documented failures involve the fill pipe, loose pipe fittings, and the vent pipe.

As was discussed previously, several locally-required tightness testing programs have resulted in the recent testing and evaluation of several thousands of existing tank systems nationwide. Further investigations of the non-tight systems have consistently implicated the faulty condition of the piping, vent lines, and fittings on top of the tank much more often than the tanks themselves. Although the phenomena of UST system failures are not yet completely understood and documented by EPA, evidence to date from the field appears to indicate that piping failures may be a more common occurrence than tank failures (particularly if a loose bung hole cover on top of the tank is not considered a "tank failure"). Although the results of the State Release Incidents Study do not indicate such a preponderance of piping-related releases, the in-the-field tightness testing results do not necessarily contradict those study findings. Many of the incidents reported by the states were identified because of the impacts of these releases in the surrounding environment. A significant amount of faulty piping is apparently not having noticeable (and reportable) impacts.

This is a plausible result given the still predominant use of suction pumping methods at existing tank systems nationwide.

4. Spills/Overfills

According to the Summary of State Reports on Releases from Underground Storage Tanks, about 12 percent of the
release incidents studied resulted from surface spills—usually spills caused by human error. These spills occurred during transfer operations as the stored product moved from delivery truck to storage tank. Although these spills are usually small, frequent spills can accumulate to sizable volumes over a period of time. Even repeated small spills eventually contaminate the soil and can affect groundwater. Repeated spills may increase the corrosive nature of soil and thus accelerate the corrosion of unprotected steel tanks and piping. Further, spilled material is not detected by in-tank leak detectors and can interfere with the capability of external monitors to detect leaks from the UST system.

There are two major types of spills. First, product transfer spills occur when the couplings on the ends of the discharge hose are improperly disconnected and release the stored product onto the ground. Transfer spills normally occur near the tank fill pipe area and release liquid into the manhole around the fill pipe. Eventually, these releases can contaminate the groundwater, because the soil around the manhole is usually very porous to allow for water drainage. Second, spills occur when the storage tank is overfilled during delivery operations. When the tank liquid level exceeds the tank capacity, stored product escapes onto the ground around the fill pipe's openings or out of the vent pipes.

C. Technical Options Available to Address Causes of Releases

Generally, the technical options available for preventing releases from UST systems fall into the following categories: (1) design, construction and installation requirements; (2) corrosion controls; and (3) operation and maintenance requirements (e.g., spill and overfill controls). Options for detecting releases when they occur may include inspections or requirements for a release detection system. EPA has considered the advantages and disadvantages of each of the available technical options and the degree of assurance they provide individually and jointly for protection of human health and the environment. The following paragraphs describe these technical options in greater detail.

1. Corrosion Protection

One way to protect steel tank system components from corrosion is to disrupt the UST "battery" (as described earlier) by reversing its electric circuit. Galvanic corrosion results when an electric current leaves the tank. If the flow of current is reversed, tank corrosion can be stopped. This kind of protection is called "cathodic." Cathodic protection systems reverse current flow by using either sacrificial anodes or impressed current. "Sacrificial anodes" can be attached to the UST system. Sacrificial anodes are pieces of metal more electrically active than the steel UST system. Since these anodes are more active, the electric current will exit from them rather than the tank. Thus, the "cathode" of the tank remains protected and free of corrosion while the attached "anode" is sacrificed. An "impressed current" protection system introduces an electric current into the ground through a series of anodes not attached to the UST system. Because the electric current flowing from these anodes to the tank system is greater than the corrosive current flowing away from the tank, the UST system is protected from galvanic corrosion. Regardless of which cathodic protection system is selected, the system requires monitoring because soil and tank conditions can change over time and alter cathodic protection needs.

Steel UST systems can also be protected from corrosion by applying coatings of a noncorrodible material, by isolating the tank electrically, and by adding soluble corrosion inhibitors to the regulated substance being stored. Of course, tanks can also be constructed totally of noncorrodible materials. Corrosion is a complex process that is influenced by many variables, many of which are site-specific. This complexity, particularly with respect to retrofitting protection on existing tanks, makes it difficult for owners and operators to select the optimum corrosion protection system without outside expert assistance. For new tank systems, this selection process is much easier. Protection systems are available that are premanufactured as part of the tank at the factory, but even these systems must be properly installed and maintained or the effectiveness of the system is degraded. Over 100,000 tanks with premanufactured protection systems have been installed nationwide. The manufacturers of these tanks now provide 30 year warranties and report no failures to date due to corrosion that have resulted in releases.

When properly designed, installed, and maintained, several corrosion control methods, or combinations of methods, will provide significant protection against corrosion. The Agency recognizes no system as foolproof, however, and believes human error or negligence will over time eventually result in some corrosion-induced releases, even from some protected systems. While they are not expected to be sufficient to prevent all corrosion-induced failures, the Agency has concluded that available corrosion protection measures can significantly reduce corrosion from current levels.

2. Design and Construction Standards

According to EPA's State Release Incidents Survey, a number of UST releases have been attributed to structural failure, especially releases from FRP tanks. There is no hard evidence, however, that these structural failures are the result of deficiencies in design and fabrication standards or workmanship at the factory. Rather, the evidence suggests that poor installation practices account for most of these releases. For example, a tank that is adequately designed is dependent upon proper backfill for structural integrity.

Most new tanks and piping have been designed to the standards set forth in national consensus codes. Even the vast majority of existing UST system components are believed to have been professionally designed and tested to withstand normal stresses and load with an extra margin of safety. Thus, besides corrosion-induced failures, most structural failure in the tank or piping itself is the result of improper installation practices.

Although information on proper UST system installation practices is provided in many local consensus codes, such guidance is often inadequate because details are frequently vague. More detailed national codes and industry-recommended practices covering underground tank system installation are found in the Petroleum Equipment Institute's "Recommended Practice 100-08" (1986); the National Fire Protection Association's "Flammable and Combustible Liquids Code 30" (1984); and the American Petroleum Institute's Publication 1615, "Installation of Underground Petroleum Storage Systems" (1979). These documents were developed for petroleum storage, but installation procedures for tanks used in other liquid storage situations are very similar. Tank manufacturers have also developed detailed, explicit installation recommendations. If these recommendations were followed carefully, many installation problems that may lead to eventual tank failures could be prevented. Even while using these more detailed codes, however, installations are subject to human error and abuse. Thus, installation-caused
releases can be significantly reduced by adherence to proper practices, but EPA does not believe that they can be eliminated entirely.

As noted previously, structural failures are reported to commonly occur in underground piping and ancillary equipment. Many such failures are suspected to be caused by corrosion that eventually results in these weakened systems succumbing to the typical-mechanical and thermal stresses that occur during daily operations. Some piping releases are also due to sloppy installation practices, such as incomplete tightening of fittings or improperly installed seals. Thus, even if piping and ancillary equipment are corrosion protected, EPA believes that some releases will still occur due to human error or negligence in adherence to proper installation procedures.

3. Spill and Overfill Equipment and Practices

Many releases have been traced to spills and overfills that occur during day-to-day operations. These releases usually result from human error. Overfills appear to represent a significant portion of operation and maintenance releases, yet they pose different problems from those associated with leaks from UST systems. For example, when an overfill occurs, the volume released is limited and cleanup can usually take place quickly.

Because these spills are more limited and immediately obvious than releases from UST systems, engineered safeguards, such as overfill alarms, shutdown pumps, or catchment basins around the fill pipe can be installed to help prevent many spills and overfills. Recommended industry practices, such as NFPA 30, also provide procedures that can be followed during the tank-filling process to avoid spills and overfills. Further discussion of spill and overfill management controls and equipment appears below in Section VI.C.1.

4. Inspections

Physical inspections can be conducted of the UST system site and equipment in order to detect existing releases and/or to identify problems that could lead to releases if not repaired. Early responses to releases or threatened releases can reduce risks to human health and the environment with regard to both acute and chronic exposure. However, in urban areas with high population densities, early responses are particularly important.

Inspections in conjunction with tank tightness tests, soap tests, air pressure tests and spark tests (for protective coatings) can be most usefully conducted at the time of UST installation to assure the integrity of the new system. Since most UST systems are buried completely underground, inspections of the installation are not very useful after installation is completed.

The inside of the tank can be inspected if the tank has a manway entrance and the tank is carefully cleaned out before internal inspection begins. Periodic internal inspections are a widespread practice in Europe, but they are rare in this country because most of our tanks do not have manways. Available internal inspection equipment includes penetrant dyes, vacuum boxes (for seam testing), ultrasonic instruments and radiographic equipment. Some of this equipment, however, does not provide a clear indication of the current status of an UST system's integrity or condition, particularly on the outside of the tank. None of these methods can be applied to underground piping because it is generally covered and inaccessible to inspection.

5. Operation and Maintenance

The exercise of good housekeeping practices and the proper operation and maintenance of equipment can further curtail releases from UST systems. Periodic maintenance of serviceable equipment such as pumps, accessible valves and dispenser units can forestall their breaking down and perhaps leaking due to normal wear and tear. Unfortunately, with UST systems, there do not appear to be many opportunities to service buried components nor is there a clear understanding of how much maintenance is warranted to prevent releases (e.g., the time period for replacing gaskets on pumps).

6. Release Detection Requirements

There are a number of release detection methods that can be applied to UST systems, particularly those storing petroleum. Numerous devices are marketed today and many more are under development. Traditionally, the principal method of leak detection used at UST systems has been manual product inventory control, sometimes supplemented with a tank tightness test to verify suspected releases. Manual inventory reconciliation, however, has been a controversial method of release detection, principally because of human error or negligence in properly measuring, recording and reconciling the measurements with records of receipts and disposers. A recent EPA study revealed that only about 20 percent of the surveyed retail service stations kept adequate inventory records (Underground Motor Fuel Storage Tanks: A National Survey. May 1986). As UST system owners and operators have become more environmentally aware, as the cost of cleanup from releases has become known, and as various state and local jurisdictions have passed legislation requiring more reliable forms of release detection, the types of devices that are available for release detection have proliferated. In addition to tank tightness testing and inventory controls, there are several other broad categories of release monitoring techniques specifically addressed by today's proposal:

- Soil gas monitoring in the excavation area;
- Monitoring for liquids on the water table;
- Interception barrier well monitoring;
- Automatic in-tank monitoring; and
- Interstitial monitoring of secondary containment systems.

The limitations associated with each of these techniques (which are discussed in more detail later in this Preamble) stem from the capability for each of the three major components found in any release detection method: (1) Sensors; (2) network design; and (3) data analysis. The major problem EPA has encountered in assessing the reliability and effectiveness of these systems has been a lack of data. EPA has embarked on a research program to gather some performance data, but expects that it will take a considerable period of time to collect such information. There presently is also very little information and experience concerning the installation and operation of these different methods. There are other methods besides those mentioned above, however, which may merit consideration for inclusion in the regulations. A good example is that of line leak detectors. Methods for detecting releases from pipes conveying products under pressure are purported to be very sensitive in detecting release conditions. Therefore, EPA does not believe that the above general methods list is exhaustive. All of these above methods are discussed in more detail in today's Preamble and more specific public comment and information is solicited (see also Section VI.D.).

IV IMPORTANT INFLUENCES ON TODAY'S PROPOSAL

To reach the environmental goals mandated by Subtitle I, EPA has considered the influence of each of the following four areas on the development of today's proposal. In each case, the Agency has sought to build upon existing trends in UST system management and regulatory practices in order to ensure more rapid and efficient
implementation of a consistent, national regulatory program affecting a large universe of over 1.4 million UST systems at over 500,000 facilities.

Experience to date shows that many different institutions are already, or are soon expected to become involved in the UST regulatory program, including municipal and volunteer fire departments, local health departments, weights and measures inspectors, and both water and hazardous waste regulatory personnel. As the future franchiser of these various state (and local) agencies, EPA believes it must enable these franchisees to establish a basic program and continually work at helping them improve performance over time. Thus, an important consideration in developing today's proposed regulations was to identify approaches that are, to the extent possible, implementable in the field by someone else besides highly trained EPA employees.

The following important influences were considered in developing today's proposal. They provide some indication of how likely today's proposal, or any other basic regulatory approach, will be quickly and voluntarily implemented by this large and diverse regulated community. To promote this nationwide UST franchise, EPA must develop regulations that are readily implementable in the hands of the state and local franchisees, or human health and the environment will not be adequately protected. Accordingly, these influences were important considerations in the evaluation of the several regulatory options discussed in Section V of this preamble.

A. Recommended Industry Practices and National Consensus Codes

Trade associations, institutes and other private organizations have developed technical codes and standards of practice to standardize the design, fabrication, and operations of a variety of tank management alternatives. Historically, the management of UST systems has been addressed and guided by these nonbinding industry standards or practices. Even where state or local UST system regulations are in effect, these industry standards and/or codes are often incorporated into law by reference.

EPA has carefully considered this body of knowledge and expertise in the private sector which has developed and administered these codes and recommended practices. A partial listing of some of the standards and codes that EPA identified in developing today's proposal is provided in Table 2. An important influence on today's proposal is the recognition of this available experience and expertise in underground tanks.

### TABLE 2.—MAJOR CODES, STANDARDS, AND RECOMMENDED PRACTICES FOR UNDERGROUND STORAGE TANKS

<table>
<thead>
<tr>
<th>Corrosion protection</th>
<th>Leak detection</th>
<th>Tank manufacturing</th>
<th>Tank installation</th>
<th>Tank cleaning</th>
<th>Internal lining</th>
<th>Abandonment or removal of underground tanks</th>
<th>Venting and air emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>API-1825</td>
<td>API-1825</td>
<td>UL-1316</td>
<td>ANSI-STDS</td>
<td>NFPA-329</td>
<td>NFPA-321</td>
<td>UFC</td>
<td></td>
</tr>
<tr>
<td>NACE RP-01-69</td>
<td>NACE RP-01-69</td>
<td>ANSI-STDS</td>
<td>NACE-STDS</td>
<td>NACE-STDS</td>
<td>NACE-STDS</td>
<td>NACE-STDS</td>
<td></td>
</tr>
<tr>
<td>NACE RP-03-72</td>
<td>NACE RP-03-72</td>
<td>ANSI-STDS</td>
<td>NACE-STDS</td>
<td>NACE-STDS</td>
<td>NACE-STDS</td>
<td>NACE-STDS</td>
<td></td>
</tr>
</tbody>
</table>


While the existing codes and standards of practice form an important body of technical information, to date they have not been universally applied. For example, most existing UST systems do not have release prevention or detection controls. In some cases, EPA questions the ability of commercially available equipment to meet industry-recommended requirements, such as the ability of release detection devices to reliably detect a leak rate of 0.05 gallons per hour. In other cases there is inconsistency among the existing codes and standards of practice. Also, many of these existing practices were developed without consideration of the increased concerns with environmental protection that prompted today's proposal. Finally, some emerging technologies are not yet covered by existing codes. Therefore, today's proposal is intended to build upon this existing body of knowledge and to go beyond it when necessary to fill in gaps or provide consistency.

B. Current Status and Future Role of State and Local UST System Programs

Many states currently have some UST legislation in place. Most of these existing programs are based on national fire code guidelines. However, at least 14 of them have recently developed very comprehensive approaches that address all aspects of UST system management. A number of county and city governments have also recently passed similar comprehensive UST system requirements. In today's proposal, EPA has attempted to construct requirements that will complement and encourage the initiatives taken by state and local governments to manage their own UST programs.

Because the existing regulatory framework is primarily the result of independent efforts at the state and local level, a variety of approaches have been taken. In some cases the approaches reflect regional factors; for example, ground-water monitoring requirements in Florida were influenced by the prevalence of a shallow depth to ground water. In other cases the
differences in approach, scope, and coverage may simply be due to local practices or preferences. EPA has evaluated these many different state and local approaches towards regulating underground tanks, and today's proposal builds upon this existing state and local regulatory framework. In supporting these existing regulatory programs, EPA hopes to achieve the goals of Subtitle I more quickly and efficiently than would be the case if it were to propose regulations greatly different from requirements that are widely accepted and already being implemented.

C. Major Trends in the Industry

Voluntary changes are occurring in underground tank system management in the retail motor fuel sector. EPA estimates that by 1987 about three fourths of the 700,000 tanks in the retail motor fuel sector will be replaced, upgraded (to the requirements of the Interim Prohibition), or removed from service. This change could occur even in the absence of finalizing today's proposed federal UST system requirements, based on well-documented past trends in the retail motor fuel sector, including a new tank installation rate of about 25,000 per year and a 4.2 percent rate of motor fuel tank system closures per year ("Regulatory Impact Analysis for Proposed Underground Storage Tank Regulation," dated 1987).

This trend to voluntarily upgrade and replace underground tank systems may actually accelerate as major oil companies and other tank owners respond to several factors: the aging of the existing tank systems (more than 50 percent will be over 14 years old by 1990); increasing public awareness of the vulnerability of the nation's ground-water resources; increasing publicity of some underground storage tank release incidents that involve large dollar damage claims and cleanup costs; and the rising cost and scarcity of environmental liability insurance.

In addition, a growing number of state, county, and city governments are requiring some form of leak detection for UST systems. This is probably the result of many of the factors cited above.

Today's approach has been developed to take advantage of and encourage these ongoing, beneficial changes in underground tank system management. It will assure that all segments of industry and geographic areas will participate in these changes, and that needed improvements in UST system management are established nationwide. The Agency intends to foster these trends in voluntary compliance as an efficient route to implementation of the requirements of Subtitle I.

D. The Number of Small Businesses Owning or Operating UST Systems

A large proportion of operating USTs are owned by small businesses (businesses with $500,000 or less in total assets). For example, 72 percent of all retail motor fuel outlets are owned by small businesses. The small businesses in this sector most likely to be subject to adverse impacts as a result of UST regulations are the open dealers (firms that own a single retail motor fuel outlet). A typical open dealer (the statistical median) has $90,000 in net worth, $210,000 in assets, and $14,000 per year in after-tax profits. Although the typical open dealer is currently a healthy and profitable business, this class also includes many firms owning old, marginal outlets that would be forced to close if faced with significant new expenditures.

In addition to open dealers, any marginal small businesses in the retail motor fuel sector could easily be forced to close as a result of incurring any major regulatory expenditure, including those associated with tank replacement or corrective action. Because of their small size, even profitable small businesses will have difficulty financing major regulatory costs; especially if they face the costly corrective action of cleaning up ground water.

As an important influence in the development of today's proposal, EPA has attempted to minimize regulatory impact on small businesses without compromising the statutory requirements to protect human health and the environment. For example, as will be discussed in Sections V and VI of this Preamble, the corrective action requirements have been specifically developed in a way that protects human health and the environment while maintaining maximum flexibility for owners and operators, including small businesses.

EPA has also conducted a Preliminary Regulatory Flexibility Analysis, as specified by the Regulatory Flexibility Act of 1980 (5 U.S.C. 601-612). This Regulatory Flexibility Analysis is summarized in Section IX.B. of this Preamble and is specifically concerned with potential impacts on small businesses. An important conclusion from this analysis is that significant impacts on small businesses are inevitable, even in the absence of federal UST regulations. Many existing tank systems are old and are either leaking or will soon leak. They will need to be upgraded or replaced. Major capital expenditures, such as the replacement of a tank system, are beyond the reach of many small businesses. These changes may be hastened by future regulations, but many appear to be inevitable no matter which regulatory approach is developed by EPA. Today's proposal attempts, to the extent possible, to provide important flexibility to small businesses in upgrading their USTs to detect and prevent future releases and thus flexibility was an important concern recognized in the development of today's proposal.

V TODAY'S PROPOSAL

This section provides a summary of EPA's proposed rule. It also sets forth the various alternative strategies considered by EPA, the advantages and disadvantages of those alternatives, and EPA's reasons for selecting the proposed alternative. Comments and relevant information are solicited on all the options EPA has considered and, based on a consideration of these comments and information, the Agency may reconsider the option selected in development of the final rule.

A. Summary of Today's Proposal

EPA is today proposing regulations for underground storage tanks storing either petroleum or hazardous substances other than hazardous wastes regulated under Subtitle C of RCRA. These regulatory measures would establish requirements for both new and existing UST systems to control the major causes of releases from these tank systems, and include corrosion controls, proper installation requirements, and spill and overfill prevention measures. The proposed requirements of Part 280 would fulfill the mandates of RCRA Sections 9003 (a), (c) and (e). The major elements of today's proposal are noted below.

- All new UST systems must be designed and constructed to retain their structural integrity for their operating life (that is, in accordance with existing national consensus codes of practice), including the use of corrosion protection of metal components. Cathodic protection must be monitored and maintained to ensure that UST systems remain free of corrosion.
- Proper installation standards must be followed in placing a new UST system into service. The UST's owner and operator must certify that proper installation procedures were followed and identify how the installation was accomplished (for example, installation by a licensed or certified installer).
Owners and operators of both new and existing UST systems must immediately follow proper tank filling practices to prevent releases due to spills and overfills. In addition, owners and operators of all new UST systems, and existing UST systems equipped with external release detection, must use devices that prevent spills and overfills. Tanks can be repaired, but only once, if they are in sound enough condition to be repaired. Recommended industry practices must be followed to conduct repairs, and in addition several tests must be conducted to ensure quality repairs.

Industry-recommended practices with regard to tank system closure must be followed and, accordingly, the UST system must be removed from the ground or left in place after removing all regulated substances, filling with an inert substance, and closing it off to all future outside access. In addition to these recommended industry practices, all owners and operators must perform an assessment at the time of tank closure to ensure that a release has not occurred at the site. If a release has occurred, then corrective action must be taken.

Release detection must be instituted at all UST systems. For petroleum UST systems several methods will be allowed, although requirements concerning their use must be adhered to by tank owners and operators. Petroleum UST systems are not required to have secondary containment with interstitial monitoring. Secondary containment and interstitial monitoring will be required at all new or upgraded UST systems storing hazardous substances, unless a variance is granted. Implementing agencies may provide these variances if the owner or operator can demonstrate that a release detection method can be applied reliably.

Phase-in of release detection at existing UST systems must occur over a 3- to 5-year period. Bare steel UST systems unprotected from corrosion are required to phase in release detection within the shorter time period.

Requirements for reporting releases are established. Indications of a potential release would have to be reported to the implementing agency, including positive results from release detection methods that have been immediately investigated by owners and operators. After reporting releases, release investigatory and confirmation must take place and, where necessary, corrective action must begin.

All existing UST systems must be upgraded or replaced to the new tank standards within 10 years, or within 3 to 5 years if a release detection method is not available that can be relied upon to detect releases from the UST system. Upgrading of petroleum UST systems would include retrofitting of corrosion protection and spill and overfill controls at all tanks; upgrading of hazardous substance UST systems would also include secondary containment and interstitial monitoring (unless a variance is granted by the implementing agency based on a demonstration and approval of the capability of the hazardous substance UST system’s release detection method).

Finally, today’s proposal requires owners and operators of leaking UST systems to follow measures for corrective action. Immediate corrective action must include mitigation of safety and fire hazards; removal of saturated soils and floating free product; and an assessment of the extent of further corrective action needed. A corrective action plan would be required for long-term cleanups addressing ground-water contamination. Cleanup levels would be established on a site-by-site basis as approved by the implementing agency that would oversee the cleanup by the owner and operator.

EPA believes that the above requirements adequately protect human health and the environment. Individual states and UST owners and operators should recognize, however, that the most cost-effective approach to protection at a single tank site or in a geographic area may involve features that exceed the minimum requirements that apply nationally. For example, if a shallow drinking water source supplying nearby wells underlies a tank site, the cost of a potential cleanup may greatly exceed the national average. At a few such sites, ground-water cleanup has become a long-term program, costing millions of dollars because of the great difficulty of restoring high quality aquifers. In these cases, a preventive approach—such as the installation of secondary containment for new or replacement tanks—may be advisable, even though today’s regulations do not propose making this a national requirement. EPA therefore encourages states and individual owners and operators to evaluate local conditions carefully and to select tank systems and associated equipment in accordance with local conditions and needs, rather than merely to achieve compliance with federal requirements.

B. Considerations Underlying EPA’s Proposed Approach

In developing today’s proposal, EPA took several important considerations into account. As several studies briefly discussed in Section III indicate, many existing UST systems lack corrosion protection, release detection, and overfill and spill controls. Thus, they are the most likely ones to leak over time, and they present the greatest immediate threat to human health and the environment. A significant number of these existing UST systems are already leaking or are likely to leak in the near future. These studies also show that many of these releases are likely to reach ground water and some will pose threats to our drinking water resources, health, and safety. While there are many technical alternatives available for improving this situation, the relative long-term performance of many of these alternatives is uncertain.

In reviewing regulatory choices, EPA concluded that certain management practices are essential to a successful regulatory program. The Agency concluded that any regulatory approach must provide for the improvement of future tanks and piping by requiring standards for the proper design, construction, and installation of new tank systems, as well as corrosion protection for all steel tank systems.

The Agency also concluded that the above measures alone would not completely eliminate all releases from new tanks. Because of the problems that may still occur, particularly with improperly installed new tank systems, the Agency concluded that release detection and corrective action will be needed in any regulatory approach to new tank systems. Because it is difficult to retrofit existing tank systems with measures for the prevention of future releases, the Agency concluded that any regulatory approach should also provide for the identification of currently leaking UST systems, detection of future releases, and the phased-in replacement or upgrading of existing leak-prone UST systems.

As new and improved tank systems replace old UST systems, EPA expects that releases will decrease significantly. EPA also expects a greater proportion of releases that do occur will result from human error in installation or operation rather than corrosion. This change in emphasis—from mechanical to human error—influenced the Agency’s decision-making because regulatory requirements and programs can be developed to ensure human mistakes are minimized to the greatest extent possible.

The above basic considerations, goals, and assumptions were important to the Agency’s choice of today’s proposed regulatory approach. Their contribution in the Agency’s decision-making is more
specifically illustrated in the discussions of the regulatory options that follow.

C. Options Considered for New and Existing UST Systems

In developing today’s proposal, EPA evaluated several regulatory options for a general approach towards regulating new and existing UST systems. The following subsections describe these options. Further consideration will be given to these options based on public comments and any additional data received prior to final rulemaking.

1. New Petroleum UST Systems

EPA considered three regulatory options for new petroleum tanks: (1) protected single-walled tanks with release detection; (2) secondary containment with interstitial monitoring; and (3) a class approach based upon the degree of risk posed by proximity to valuable ground-water resources.

Option 1: Protected Single-Walled Tanks With Release Detection

Under the first option, EPA would require new tanks to be constructed of a single wall, protected from corrosion, and equipped with a method of release detection. (Of course, owners or operators of new UST systems could voluntarily exceed these requirements, for example by use of secondary containment and interstitial monitoring.) Under this option, EPA must make additional decisions concerning allowable methods of release detection and the frequency with which those methods would be used. For example, EPA would have to determine whether to require any one or a combination of release detection methods, such as tank tightness testing, inventory controls, ground-water monitoring in the saturated zone, liquid monitoring on the water table, vapor monitoring in the unsaturated zone, or automated monitoring within the tank. EPA would also have to determine the frequency with which these methods must be applied. This frequency could range from continuous monitoring to an infrequent “check” of the tank system. These decisions concerning release detection are discussed in Section VLD. The following discussion focuses on EPA’s choice between single-walled tanks and secondary containment systems for petroleum UST systems.

There are several major advantages in allowing the use of protected single-walled tanks. This option should prevent most of the releases that commonly occur today. It provides the regulated community flexibility to choose among the widest range of protective release prevention and detection options to comply with the regulations. It costs less initially than the other options. And, because this option builds on existing industry practices and is consistent with most state programs now under development, it is most likely (of all the options) to gain voluntary compliance from the regulated community. This approach also has the additional advantage of leaving more options open to the states in defining classes of UST systems or locations.

One significant disadvantage of this option is that the performance of release detection methods is relatively uncertain and detection is not guaranteed at every site that may have a release. Thus, under this option, there is risk that some releases will occur that cause significant damage to groundwater resources before being detected through smell, taste, or other means. Another disadvantage is that long-term costs may be greater than for the secondary containment option due to the use of unproven release detection methods, and to increases in corrective action, operational, and insurance costs. Finally, in contrast to secondary containment (which is designed to capture releases before they have such adverse impacts on the environment) under this approach more drinking water aquifers may be affected, even when releases are ultimately detected and corrective action is taken.

However, EPA believes that there will be few releases from a protected single-walled tank system with release detection which will occur, go undetected, and cause significant damage before corrective action is taken. EPA anticipates that many of the releases occurring today will be prevented by corrosion protection measures. For example, the Canadian Province of Ontario’s UST Program has caused 72 percent of their UST universe to be made of noncorrodible materials or provided with corrosion protection since 1974 and government officials report there has not yet been one release discovered from all these protected tanks. Officials from Denmark report similar successes with corrosion protection technology, which has been in use there since 1974. Thus, EPA believes releases will occur much less frequently with new tanks that conform to today’s proposed regulatory standards for design, construction, installation, and corrosion protection. Because of human error, especially with respect to installation and operation of underground piping systems, EPA anticipates that releases will continue to occur at some new tank systems. However, release detection methods will be capable, in most instances, of detecting these releases and the number of releases that go undetected should be very small.

As discussed in Section VI, the Agency believes that certain release detection methods are very promising (although not yet completely understood) in their capacity to detect petroleum releases. For example, the Agency believes that various methods used in the excavation zone can be relied upon if certain conditions pertaining to the network of monitors, the backfill, and the hydrogeology are satisfied. The Agency believes that the more frequently these methods are applied, the more reliable they will be in detecting releases. Thus, a continuous monitor or a method that is sampled frequently is more likely to detect releases when they are still small and more easily corrected.

Based upon the above conclusions, the Agency has decided to propose release detection methods sampled on a frequent to continuous basis as capable of detecting the majority of leaks that occur from new petroleum tank systems.

Therefore, EPA believes that protected single-walled tanks with these leak detection systems will protect human health and the environment. The Agency solicits any information that may indicate less frequent monitoring may be sufficient if new UST systems are protected from corrosion and carefully installed.

Option 2: Secondary Containment With Interstitial Monitoring

The second option considered by EPA was to require all new UST systems to have secondary containment with release detection in the interstitial space between the tank system and the secondary containment. Under this option, the owner and operator could obtain a variance from the secondary containment requirement upon demonstration to the implementing agency that the tank system has a release detection system that works as effectively as secondary containment with interstitial monitoring.

The major advantage of this option is the added degree of protection it affords. Secondary containment provides two complete barriers to prevent releases, and is simpler, more certain system for detecting releases between the barriers. Requiring all new UST systems to use secondary containment and interstitial monitoring, which is widely believed to be the most accurate monitoring available, would guarantee that fewer releases would go undetected. This is potentially important because cleanup
to drinking water standards can be very difficult and expensive to achieve. Another possible advantage of this option is the long-term savings from reduced costs for corrective action, insurance, leak detection, operation and maintenance. EPA estimates that the added initial costs may be fully offset by these savings and that fewer acres of ground water and soil will be damaged, if this option is chosen. In addition, this option avoids problems that could arise if owners or operators are unable to pay for corrective action, because this is the only option that requires containment of all releases. Finally, this option provides the advantages of being simple, easy to understand, and easy to administer and enforce. Frequent to continuous interstitial monitoring provides enforcers with a mechanism for checking releases instantly. Further, EPA has found no corrective action technology capable of bringing water quality back to national standards, which makes avoidance of releases even more important.

There are several disadvantages, however, to requiring secondary containment as a general rule. First, its initial costs are higher than those for the other options. Although secondary containment may save costs in the long run by reducing the need for corrective action, the higher initial costs would have more adverse impacts on small businesses than any of the other options. (See Regulatory Impact Analysis, Section IX.) Also, the incremental benefit it provides over the single-walled tank system may not be substantial, because relatively few releases are anticipated from new, single-walled, protected tank systems and leak detection systems are expected to be relatively effective with the single-walled tanks. In addition, the secondary containment option conflicts with recent emerging state and local programs and significantly curtails state flexibility to allow other approaches. Thus, requiring secondary containment may discourage states from adopting an UST program or may delay state program approvals. Accordingly, EPA could be placed in the difficult position of directly administering a very large regulatory program. Reliance on an overburdened federal program would result in slower compliance with regulatory requirements for new UST systems and a corresponding delay in addressing leaking UST systems. The delay in achieving compliance with these requirements may be exacerbated by a reluctant regulated community discouraged from replacing existing tanks because of the higher cost of secondary containment. Also, because this approach is contrary to the ongoing voluntary selection within industry of single-walled protected tank systems, it would be less self-implementing. Finally, requiring secondary containment would eliminate the use of protected single-walled technology, which EPA considers to be a relatively effective alternative now widely available and used.

Option 3: The Class Approach

The third option was to require secondary containment at a class of locations where tanks pose a particularly high threat and to allow protected single-walled tanks with release detection at all other locations. Under this option, EPA would need to establish criteria for the high risk settings, usually involving ground water, where "extra" protection would be required. Several alternative criteria are possible: "Class I" ground-water areas, as defined in EPA's Ground-Water Protection Strategy; "wellhead protection areas" designated under the new program established by the Safe Drinking Water Act Amendments of 1986; or areas established by the states, if they satisfy certain minimum criteria established by EPA. Alternatives for determining the class of high risk locations and an approach for achieving implementation by state programs are discussed in more detail in Section V.E. below.

The major advantage of a class approach is that it allows EPA to tailor more closely its requirements to the risk presented at a particular location, thereby minimizing overprotective regulation. It would allow EPA to take a more preventive approach (secondary containment) at locations where a release would present the greatest threat. This approach would permit the Agency to provide this extra protection to sensitive areas without overregulating tanks located in less sensitive areas. EPA estimates that this option is potentially the lowest cost of the three options because the requirements that are more costly in the initial stages of the operational life of a new UST system are tailored to apply only in the more sensitive or vulnerable settings. In addition, the class approach would encourage state efforts to identify and provide greater protection to their most important ground-water resources, activities that EPA supports with funding under the Clean Water Act for development of state ground-water protection strategies. Funding for state designation of wellhead protection areas under the Safe Drinking Water Act will begin in Fiscal Year 1988.

The class approach, however, has several drawbacks. First, it adds a layer of complexity to the regulations. Unless there were a simple means for determining which requirements applied to a particular UST system location, it would be more difficult for the regulated community to know how to comply without significant guidance and support from the implementing agency. The absence of such technical assistance could complicate enforcement for the implementing agency. Further, while many states have already identified or plan to identify areas where their ground water is especially important (many are also expected to designate wellhead protection areas under the new program), only a few have at this point used such classifications for establishing different regulatory requirements for underground storage tanks. States seeking program approval that have established more protective requirements for some tank locations (based on state classes or criteria) would have to demonstrate that these requirements are applied at least asstringently to all tank systems in locations meeting EPA's criteria, and modify their programs if needed. Other states would need to set up mechanisms for identifying where the more protective requirements apply. These added steps in state program development and in EPA approval of state programs would delay or make program implementation less certain.

While the class approach was considered very attractive, it was not the Agency's selected option in today's proposal due largely to concerns about difficulty of implementation. Because of the substantial interest that has been expressed in this approach, however, the Agency is especially interested in receiving comments about the feasibility of the class option, and is soliciting comments, in particular, on a specific approach for implementing the class option that is discussed in detail in Section V.E. below.

Conclusion

Because of the large number of facilities subject to these regulations, the success of the UST program depends on a high level of voluntary compliance and an effective program implementation at a state or local level of government. For these reasons, the Agency was influenced by a desire to create a program that would protect human
as a direct result of the program's being (1) implemented and enforced by state and local governments, and (2) readily accepted and understood by the regulated community as building on acceptable current practices. Upon considering the options for new petroleum UST systems, the Agency has concluded that the requirement of Corrosion-protected, single-walled tanks and piping with release detection would be protective of human health and the environment, would be compatible with many of the more aggressive state and local programs that have been developed or that are under development, and would be more likely to gain voluntary compliance from larger businesses already moving in that direction and from smaller businesses concerned about initial costs.

The Agency is concerned, however, about the lack of data concerning the effectiveness of various release detection methods. EPA is also particularly interested in receiving comments and information relevant to the above consideration of options for new petroleum UST system standards, including the performance of different types of protected UST systems. Based on comments or information provided during the public comment period, the Agency may, for example, decide to promulgate secondary containment requirements, or the class option, for all new UST systems.

2. Existing Petroleum UST Systems

EPA is today proposing that all existing petroleum UST systems be upgraded to new UST requirements or replaced in 10 years, and that they institute a release detection method phased in within 3 or 5 years depending on the type of UST system. This proposed approach results from consideration of several regulatory options that address four important issues associated with existing petroleum UST systems:

1. Mandatory upgrading or replacement of substandard UST systems;
2. Methods of release detection;
3. Frequency of release detection; and
4. Phase-in of release detection.

These issues are briefly discussed below.

Issue #1: Mandatory Upgrading or Replacement of Substandard UST Systems

As described earlier in this Preamble, existing UST systems are believed to present the greatest and most immediate threat to human health and the environment. EPA has concluded that future releases can be avoided if existing substandard UST systems are upgraded or replaced before they leak. For example, existing steel UST systems that are unprotected from corrosion can be retrofitted with impressed current protection systems that can substantially curtail or stop the effects of corrosion. Or, an existing tank can be retrofitted with an interior coating that provides an extra layer of protection between the regulated substance stored and the environment. (These technical options are discussed in more detail in Section VI.B. and C.)

Four regulatory options for addressing the issue of mandatory upgrading/ replacement of existing unprotected petroleum UST systems were considered during development of today's proposal:

- Rapid upgrading/replacement;
- Gradual upgrading/replacement;
- No upgrading/replacement; and
- A class approach.

These options are discussed in more detail below.

Option 1: Rapid Upgrading or Replacement. This option would require all unprotected substandard UST systems to be upgraded to the new tank standards or replaced rapidly (e.g., within 3 to 5 years). Requiring such changes prior to three years is probably not feasible given the large universe of UST systems subject to today's proposal. For example, none of the most aggressive state or local UST programs have attempted to implement a program as ambitious as that.

In theory, the primary advantage of a rapid replacement option is avoidance of most future releases by requiring the upgrading/replacement of many existing UST systems before they leak. Thus, this approach lowers the risks to human health and the environment by preventing many future releases. Similarly, it could also result in lower and more certain total costs to the regulated community by avoiding the adverse impacts of cleanup costs.

Given the large number of existing unprotected UST systems, the major problem with this approach is that it probably cannot be successfully implemented. For example, all 1.4 million UST systems cannot realistically be retrofit with release detection methods and cathodic protection within a few years. It is doubtful that enough equipment for qualified installation personnel would become available to perform such an enormous task in a short time. None of the existing state or local UST programs has undertaken this approach. Also, because it requires the most initial costs from the regulated community and provides a short amount of time for accomplishing these changes, this option would have the greatest immediate impact on small businesses.

Option 2: Gradual Upgrading or Replacement. This option would require existing substandard UST systems to be upgraded or replaced more gradually than Option 1 (9 to 12 years). EPA believes that this approach can be implemented for the large number of existing UST systems. An implementable regulatory program helps to ensure that safeguarding of the environment actually takes place. The regulatory impact analysis undertaken in support of today's proposal indicates significant improvements can result during this gradual upgrading replacement period (see Section IX). The primary advantage of this approach, therefore, is that it provides a great deal of environmental benefit in a manner that can realistically be accomplished by the regulated community. Also, this more gradual approach provides more flexibility to state and local UST programs and enables them to establish their own priorities for mandating improvements. Finally, a more gradual phase-in enables small businesses to plan ahead and prepare for making the necessary improvements.

The major disadvantage to this approach is that the additional time allowed for improvements to take place also provides additional time for more releases to occur and more product to be released. However, this problem should be reduced by the much wider use of release detection and the fact that, under today's proposal, release detection requirements are phased-in over a shorter time period for the most risk-prone tank systems. This option correspondsly requires more reliance on corrective action to protect human health and the environment.

Option 3: No Upgrading/Replacement.

As noted earlier in Section IV, ongoing trends in industry management practices lead the Agency to believe that many existing UST systems will be voluntarily upgraded or replaced over the next several years. In theory, these trends alone could be relied upon to upgrade and replace all existing UST systems. However, it seems unlikely that a purely voluntary program could guarantee nationwide consistency within a few years for the substantially heterogeneous universe of 1.4 million UST systems. Also, the same people who cannot afford voluntary upgrading or replacement will not be able to afford the costs of corrective action should their UST systems leak. Therefore, to protect human health and the
environment, the Agency rejected a totally voluntary strategy for upgrading or replacing existing UST systems.

**Option 4: Class Approach.** Upgrading or replacement of existing UST systems based on a class approach would require rapid improvement of existing UST systems located in more vulnerable areas and allow a more gradual approach towards improvement in all other areas. As with the class approach for new tank requirements, the major advantage of this approach is that it allows EPA to tailor more closely its requirements to the risks theoretically presented at particular locations. The establishment of easily understandable and readily implementable classes that would be adopted by state and local UST programs, however, is difficult to accomplish. (See Section V.E. for further discussion of the possible basis for a class approach in which the Agency is specifically soliciting public comment today.)

**Conclusion.** EPA has concluded that many existing substandard UST systems are likely to leak in the future if steps are not taken to upgrade or replace them. The Agency believes that upgrading or replacing this existing universe of predominantly bare steel UST systems will reduce the number of releases that threaten the environment. Because of the large number of UST systems, the Agency has also concluded that it is simply not practicable to mandate that this change take place over a period as short as 3 to 5 years. The more gradual approach being proposed today will protect the environment by allowing the regulated community to plan for and carry out this change efficiently. It will also enable the development and sorting out of the most reliable methods of release detection from among the many that are being offered commercially. It also enables state or local programs to establish priorities for implementing improvements to existing UST systems, which should also lead to more effective protection of the environment.

**Issue #2: Methods of Release Detection**

As discussed earlier in this preamble, EPA has concluded that a fundamental goal of any regulatory approach must include the establishment of a reliable means of detecting releases at UST systems, including existing UST systems. The Agency is today proposing to allow existing petroleum UST systems to use the same release detection methods that EPA would allow for new petroleum UST systems. (These release detection methods are discussed in detail in Section VI.) For example, as with new UST systems, the Agency believes that various methods used in the excavation zone can be relied upon at existing UST systems if certain conditions pertaining to the level of background contamination, the network of monitoring wells, type of backfills, and site characteristics are satisfied.

Particularly for petroleum, the Agency presently believes that release detection can be used for the first time at most existing tanks in a way that will significantly reduce the number of releases that go undetected. EPA has identified over 250 devices that are available commercially or being developed to detect releases in UST systems. An important consideration in developing today's proposal was to allow this burgeoning field of release detection technology to continue to develop. However, EPA has very little performance data or field experience concerning most of these methods. Therefore, another important objective was to ensure that only sound and reliable release detection methods are applied. Today's proposed approach to determining what methods of release detection are adequately protective has been guided by these two important considerations.

**Issue #3: Frequency of Release Detection**

As briefly discussed in the options for new tanks, EPA believes that the more frequently the various methods of release detection are applied, the more likely they are to detect releases. Thus, a continuous monitor or a frequently sampled method is more likely to detect releases when they are still small and more easily corrected than less frequent monitoring. Therefore, the Agency is proposing that release detection methods be used that are sampled frequently to continuously. The Agency has considered the risks posed by less frequent approaches and has concluded that they may not be adequate to protect human health and the environment, particularly with older, less protected existing tank systems.

Infrequent monitoring (for example, every 1 to 3 years) may not be repeated often enough to determine or establish whether a particular result is accurate. In addition, the amount of release that could occur between such infrequent monitoring episodes could be substantial, pose risks to human health and the environment, and require significant and costly cleanups. Given these concerns and the current status of existing tank systems (EPA believes most of them are leak-prone), the Agency has concluded that frequent to continuous monitoring should be required. However, considering the estimated number of existing tanks covered by these regulations (1.4 million), all UST systems cannot realistically be retrofitted within a few years with methods that apply frequent to continuous monitoring. In fact, because these methods have not been applied to date on a widespread basis, the Agency is concerned that not enough equipment and qualified installation personnel would become available over the next several years to perform such a retrofitting task reliably on such a mass scale basis. Also given the unproven nature of much of this equipment, the Agency is concerned that requiring UST owner and operators to use only frequent to continuous monitoring methods could force the selection and installation of unsound methods.

In response to these important practical considerations, the Agency has concluded that it should also allow the use of relatively infrequent tank tightness testing, in conjunction with manual product inventory control techniques on an interim basis, before existing UST systems are required to gradually upgrade or replace to the new UST standards (including frequent to continuous monitoring). Tank tightness testing and inventory controls are the two most widespread and available release detection methods and they have been traditionally used within large segments of the regulated community. However, inventory control must be practiced daily to be used for release detection purposes. On the other hand, because of the high costs and difficulties associated with doing a precision tightness test, this method of detection can only be required on a relatively infrequent basis. Thus, today's approach allows the use of relatively infrequent (every 3 to 5 years) precision tightness testing only if this testing is combined with daily inventory controls and monthly reconciliation practices. This "infrequent" release detection method is allowed at existing UST systems only during the 10-year period of gradual upgrading and replacement.

Tank tightness testing and inventory controls both have distinct advantages for existing UST systems, because they do not require retrofitting and operation of permanent equipment by the UST owner and operator. These advantages contrast with the difficulty that numerous small businesses in this regulated community would face if they all had to retrofit and operate (for the first time) frequent to continuous monitoring. Thus, today's proposed approach of infrequent tightness testing and frequent inventory controls allows
them more flexibility during the 10-year interim period as they decide whether to upgrade or replace their UST systems to the new tank standards or to close their systems. As discussed in more detail in Section VI, however, the Agency is concerned with the reliability of manual inventory controls and believes that tank testing cannot realistically be used for a majority of existing UST systems more frequently than once every 3 to 5 years. Thus, EPA believes that, even with the combined use of these methods, releases from existing UST systems can go undetected. Therefore, EPA is proposing to prohibit the use of infrequent tank testing combined with inventory controls as a method of release detection for new or upgraded UST systems. Frequent tank testing with inventory controls will be allowed. Thus, infrequent tank testing and frequent inventory reconciliation is proposed only as an interim measure that responds to the practical problems of program implementation resulting from the attempt to establish release detection at a very large number of existing UST systems within a short timeframe. The Agency is interested in receiving data and comments on this issue, particularly whether retrofitting more frequent release detection systems over a 3-5 year period would be feasible or appropriate.

**Issue #4: Phase-In of Release Detection**

Today, EPA is proposing to phase in release detection at existing petroleum UST systems over a 3- to 5-year period. EPA has chosen an approach that would require tanks with the greatest propensity to leak to have release detection in place sooner than others. For example, steel UST systems that are not protected from corrosion would have to be provided with release detection within 3 years, whereas protected UST systems already in the ground would have up to 5 years to add release detection. Because of the large number of existing UST systems to be regulated, the Agency has concluded that the implementation of release detection requirements should be phased in. As a practical matter, the various methods allowed by the proposed rule are not yet widely practiced or readily available on a mass scale basis. The Agency considered three different regulatory options regarding the phase-in of release detection: (1) rapid phase-in (over 1 to 2 years); (2) gradual phase-in (over 3 to 5 years); and (3) a class approach (combination of options 1 and 2 based on location). A more detailed discussion of some of the methods available for implementing these approaches to the phase-in of release detection is provided in Section VI of this Preamble. Although the Agency recognized the benefits that could result from requiring release detection for existing tanks very quickly, as a practical matter, EPA has concluded that implementation of these requirements will take at least 3 to 5 years. Evaluation of several of the most active state or local UST programs indicates that this timeframe is the minimum necessary. Several industry upgrading programs also are phasing in release detection over a number of years.

**Tank owners and operators are required by today's proposed regulation to comply with the release detection requirement within 3 years for tanks without corrosion protection and within 5 years for corrosion protected or noncorrosible tanks. Tanks that cannot meet the release detection requirement will be required to close within the same 3 or 5 year period.**

As stated previously, EPA has concluded that implementation of release detection will take at least 3 to 5 years to phase in. However, EPA has also concluded that certain types or classes of tanks may pose a more substantial threat to public health and the environment than others, and in some situations, that threat might be imminent. As a result, EPA may require in the final regulations certain types or classes of tanks to comply with release detection requirements prior to the end of either the 3- or 5-year phase in periods proposed today. EPA intends to study this issue further to identify those tanks for which it may require compliance on an accelerated basis. The factors EPA plans to consider in identifying these groups will at a minimum include: tank age; vulnerability of hydrogeology; distance to drinking water wells; and distance to vital ecological systems. EPA solicits comments on the appropriateness of these factors and what additional factors it should consider. EPA also strongly encourages states and local programs to set priorities for implementing all of the technical requirements of today's proposed regulation.

EPA rejected requiring the use of inventory controls at all UST systems during the phase-in period because of the difficulty of getting the regulated community to implement such a requirement successfully. Most owners and operators do not conduct inventory controls and various studies have led EPA to suspect that many are not monitoring inventory controls carefully enough for leak detection purposes. Thus, in the absence of a massive training and technical assistance program by EPA, use of this method is proposed to be phased in with the periodic use of tank tightness testing.

EPA also considered using a class approach to phasing in release detection requirements. Under this approach, EPA would phase in release detection at locations deserving extra protection first. This approach, however, encountered the same constraints identified for its use with the other regulatory components discussed earlier. (See Section V.E. for a further discussion of the class approach.)

**3. New and Existing Hazardous Substance UST Systems**

EPA is proposing secondary containment for all new and upgraded existing hazardous substance UST systems. In general, the Agency has chosen the same regulatory options for new and existing hazardous substance UST systems that it did for petroleum UST systems. The factors that caused the Agency to select a different approach for hazardous substance UST systems are discussed below.

EPA considered several important differences between petroleum UST systems and hazardous substance UST systems. Hazardous substance systems, and when they do they typically have only one UST system.

The Agency acknowledges that some hazardous substances are very similar to petroleum and that release detection methods for those substances could
perform equally well in detecting releases. For this reason, the Agency has included a variance provision in the rule. There are many hazardous substances, however, for which these methods would not be reliable. For example, excavation zone liquid monitors cannot be used with hazardous substances that have a specific gravity greater than water because of the likelihood that releases of these substances would not be intercepted by monitoring devices located on the ground-water table. Similarly, vapor likelihood that releases of these substances that have a specific gravity monitors cannot be used with hazardous example, excavation zone liquid substances, however, for which these rule. There are many hazardous has included releases. For this reason, the Agency perform equally well in detecting substances that are not volatile enough to create detectable gas. vapors in the excavation area surrounding the UST system.

As mentioned earlier in the discussion of regulatory options for petroleum UST systems, EPA anticipates that many future releases can be avoided by corrosion protection measures applied to new UST systems and upgraded existing UST systems. However, EPA anticipates that some releases will continue to occur at new protected UST systems or upgraded existing UST systems because of faulty installation, inadequate design and maintenance of corrosion protection, or other unexpected events. Given the current lack of information concerning the availability of reliable release detection methods for hazardous substances, EPA is concerned that these releases could go undetected unless secondary containment equipped with interstitial monitoring is used. However, to provide flexibility, the Agency is proposing the following variance to secondary containment: the long-term use of release detection with corrosion protected single-walled UST systems can be allowed with hazardous substance UST systems if it is demonstrated that the release detection system will be adequately protective of human health and the environment. The demonstration must prove to the implementing agency that the detection method selected complies with the performance standards and the requirements provided in the regulations for the particular hazardous substance stored in that UST system and at that site. The Agency requests comment on whether variances should be granted to more than one owner and operator who petition jointly and have similar tank/ substance/release detection characteristics. EPA solicits comment on whether UST system owners and operators would find such a provision useful and whether public notice of such variances would be appropriate.

In the short term, while existing hazardous substance UST systems are being upgraded to the new tank standards (using either secondary containment or protected single-walled UST systems under the variance procedure), EPA has decided to propose the use of other methods of release detection—including tightness testing combined with inventory controls—provided the limitations in the regulations concerning the use of these methods are met. As stated earlier, EPA expects that many hazardous substances have properties that are very similar to petroleum and therefore may be able to make reliable use of the same release detection methods currently available or being developed for petroleum UST systems. EPA believes that this interim allowance of a variety of release detection methods is necessary due to the large universe of tanks that must ultimately be retrofitted or replaced with secondary containment. If reliable release detection or tightness testing is not available or cannot be developed, the owner or operator must—within 3 years if the UST system is bare steel or within 5 years if the UST is protected from corrosion or made out of noncorrosible materials—retrofit or replace with secondary containment and interstitial monitoring to ensure releases are reliably detected and human health and the environment protected.

The Agency also considered the advantages and disadvantages of other regulatory issues considered in developing the proposed regulation of existing petroleum UST systems. The Agency concluded that the regulatory options and approaches being proposed today for existing petroleum UST systems are also appropriate for existing hazardous substance UST systems: (1) gradual mandatory upgrading or replacement of unprotected UST systems; (2) frequent to continuous monitoring, with the interim allowance of inventory controls and tank testing where feasible; and (3) phase-in of release detection over a 3- to 5-year period depending on tank type. EPA believes the use of the same basic underlying approach to technical tank standards for both petroleum and hazardous substance UST systems will minimize confusion within the regulated community and with the state and local UST programs. It also provides significant flexibility, as discussed earlier, and should therefore foster voluntary compliance and more rapid implementation that should greatly improve protection of human health and the environment.

D. Options Considered for Corrective Action

Today's proposal provides for separate corrective action processes for petroleum and those that contain hazardous substances. These requirements apply to regulated UST systems (as defined by this rule) and UST systems for which tank technical standards have been deferred by the Agency to a subsequent rulemaking.

The Agency recognizes that this decision to propose separate corrective action requirements for petroleum and hazardous substance UST systems differs from its approach to technical tank standards for which many of the standards are common for both petroleum and hazardous substance USTs. The Agency believes, however, that such a separation is desirable for UST corrective action as a means of avoiding confusion over which procedures must be followed at a particular site. The Agency solicits comments on this approach, however, and any specific proposals for an alternative approach. Specifically, the Agency requests comment on whether the requirements should be integrated into one subpart.

An important goal of the Agency's UST program is to safeguard public and private drinking water supplies as necessary to protect human health. In addition, the Agency believes strongly in the value of protecting the environment through its UST programs, and in addressing the safety concerns (e.g., fire and explosion) that can be associated with regulated substances stored in underground tanks. The corrective action processes and requirements for petroleum and hazardous substance UST systems have been crafted to fulfill these objectives.

As discussed in the following sections, the Agency selected a site-specific approach to the setting of cleanup target levels for corrective action of UST releases. In considering this and the other options for UST corrective action, the Agency started from the following assumptions:

- Protection of human health and the environment is aided through state and local participation in this program.

A corrective action program that is sufficiently flexible to accommodate many existing (and future) state and local approaches to UST corrective action is critical. This will allow for program and cleanup oversight to occur at the level best suited to the size and diversity of the regulated community.
and the diversity of UST environments nationwide.

- The corrective action program must accommodate expected changes in the nature of the UST release problem. In the first five years of the federal program, the Agency expects that the UST corrective action program will be confronted with a growing number of identified release sites. Many of these will be discovered with sizeable releases over a long period of time. As the tank standards are implemented and enforced, however, the later years of the program should see fewer releases and these releases should be detected earlier. The UST corrective action requirements should function well in both stages of the program’s lifetime.

- The corrective action process should be constructed to get quickly to requirements should function well in releases over a long period of time. As will be discovered with sizeable UST program, the Agency expects that the nature of the accommodate expected changes in the nationwide.

- The corrective action process should be constructed to get quickly to requirements should function well in releases over a long period of time. As will be discovered with sizeable UST program, the Agency expects that the nature of the accommodate expected changes in the nationwide.

- The corrective action program must accommodate expected changes in the nature of the UST release problem. In the first five years of the federal program, the Agency expects that the UST corrective action program will be confronted with a growing number of identified release sites. Many of these will be discovered with sizeable releases over a long period of time. As the tank standards are implemented and enforced, however, the later years of the program should see fewer releases and these releases should be detected earlier. The UST corrective action requirements should function well in both stages of the program’s lifetime.

1. UST Systems Containing Petroleum

Today’s proposal divides regulatory requirements for petroleum UST corrective action into two stages. The first stage consists of the immediate abatement actions all owners and operators must take in response to a release from a petroleum UST system. The second stage concerns requirements that specify longer-term corrective action measures owners and operators must undertake if the implementing agency determines, on the basis of submitted data, that additional corrective action is required to protect human health and the environment. Review and evaluation of owners’ and operators’ reports, corrective action plans, and establishment of cleanup requirements are left to the implementing agencies.

In choosing its corrective action approach, EPA was most influenced by the need to develop a program that can be implemented at a state or local level at a very large number of sites with a diversity of environments. The Agency considered using the National Contingency Plan (NCP) (40 CFR 300) process or the process established by current RCRA hazardous waste tank regulations (40 CFR 264.196) to structure the petroleum UST corrective action process. The Agency concluded, however, that implementation of the procedures required by the NCP and RCRA tank regulations would not be appropriate for the very large number and diversity of petroleum UST sites. In addition, the lack of explicit provisions in the NCP and RCRA process for free product removal, a common practice for petroleum UST cleanups, convinced the Agency that a slightly modified process is needed for responding to petroleum UST releases. While the proposed petroleum UST corrective action process differs from those of the NCP and RCRA, the basic structure is the same for all three: control the release source, determine the extent of contamination, determine the extent of remediation required, and take the necessary cleanup actions.

Stage I: Investigation of Releases and Immediate Corrective Action

The first stage of the corrective action process concerns immediate steps to abate immediate safety and health hazards whenever a release from a petroleum UST is indicated or suspected. To comply with these requirements, the petroleum UST owners and operators must: (1) immediately notify the appropriate agency of the possible release; (2) stop the release; address safety hazards from fire or explosion; (3) remove visible contamination from the immediate area; and (5) investigate to determine the existence and extent of floating free product.

If this investigation detects a free product plume, the owner and operators must submit a report to the implementing agency, unless the implementing agency determines that a report is not required. In all cases, the owner or operator shall initiate the removal of the free product to the maximum extent practicable. This requirement to remove free product to the maximum extent practicable in all cases reflects the following conclusions: (a) free product is a safety hazard if left uncontrolled, (b) free product is a continuing source of potential dissolved ground-water contamination, (c) free product removal is a relatively inexpensive corrective action measure, and (d) free product removal is a common practice today in nearly all UST release cases studied by the Agency.

If this investigation detects a free product plume, the owner and operators must submit a report to the implementing agency, unless the implementing agency determines that a report is not required. In all cases, the owner or operator shall initiate the removal of the free product to the maximum extent practicable. This requirement to remove free product to the maximum extent practicable in all cases reflects the following conclusions: (a) free product is a safety hazard if left uncontrolled, (b) free product is a continuing source of potential dissolved ground-water contamination, (c) free product removal is a relatively inexpensive corrective action measure, and (d) free product removal is a common practice today in nearly all UST release cases studied by the Agency.

The owners and operators must also investigate and characterize any plume of dissolved contamination in the ground water and the extent of any remaining soil contamination. The results of this investigation must be reported to the appropriate implementing agency. The implementing agency will use this information as the basis for determining, through a site-specific assessment, if the owners and operators will be required to carry out additional steps of the UST corrective action process.

In the course of the development of an approach to petroleum UST corrective action, the Agency requested and received extensive input from participants in state UST programs. Based on this input, the Agency chose an approach that reflects steps consistently taken by states upon the discovery of a petroleum release regardless of differences in standards and regulations. There was consensus within and outside the Agency on the need for these requirements. Nevertheless, public comment is sought on the following issues:

- Is the definition of free product provided in this proposal adequately precise in the context of the first stage of the proposed corrective action requirements, and, if not, what definition would be more appropriate?
- Should the scope of the corrective action measures required in Stage I (to be implemented for all petroleum releases) be expanded or reduced, and, if so, why?
- Should the requirement to undertake an investigation of the extent of contamination explicitly include ground-water sampling and analysis, and, if so, under what conditions?

Stage II: Longer-Term Corrective Action Options

The second stage of the proposed corrective action process addresses longer-term corrective actions. If the owners’ and operators’ investigation of a petroleum UST release indicates that there is dissolved contamination in ground water and remaining subsurface soil contamination, longer-term corrective actions may be required. EPA considered three regulatory options for establishing longer-term cleanup requirements in the corrective action process: (1) national cleanup standards with a variance provision; (2) site-specific standards to match the risk presented; and (3) a predetermined class approach. All three options are currently...
in use in some form by various states in their UST programs.

EPA proposes to use the second option, under which a site-specific risk analysis is the basis for setting cleanup requirements for longer-term corrective action. The Agency has selected this option based upon a comparison of the merits of all three options and an evaluation of state program experience. The Agency, however, solicits comments with supporting data (where available) on all three options. The three options are described below.

Option 1—National Cleanup Standards with a Variance Provision.

The first option is to base cleanup levels on all three options. The three options with supporting data (where available) are included so that an opportunity to consider site-specific factors is provided. Several state programs take this general approach to corrective action for UST releases. The experience of these programs has been that the variance provisions allowing for exceptions to the standards the states have established for their programs are used very frequently. These variance provisions are used extensively for two reasons. First, environmental conditions at UST release sites vary considerably, and in some instances, existing contamination poses little or no hazard to human health and the environment. Second, available technologies employed to remove groundwater contamination resulting from UST releases are unable to achieve health-based standards. To adjust clean up to the levels that available technologies can attain, states have had to grant numerous variances based on the remaining threat to health and the environment presented by site-specific conditions. On the basis of such experience, the Agency has concluded, therefore, that an approach to longer-term UST corrective action based on a national standard with a variance provision is unlikely to be successful in avoiding the necessity for site-specific assessments at many UST release sites. Implementation problems arise as the large number of variance reviews lead to delays in effective general implementation.

The consistency of cleanup that might at first appear to result from a national cleanup standards approach is also reduced by the states' ability to impose standards more stringent than federal requirements. The health-based requirements that several states currently employ vary considerably, and, therefore, some variation from any proposed national standard is expected. In addition, the Agency is concerned that these differences may delay authorization of state programs. Given the large number of petroleum UST systems, the diversity of their settings and the states' knowledge and experience gained through their UST programs, state participation through authorized state programs is crucial.

The Agency is also concerned that the long process of establishing defensible national health-based cleanup standards under Option 1 could delay initiation of cleanup actions under the program. The Agency could use background concentrations as the basis for establishing cleanup levels. The use of background concentrations is also problematic, however, because the site-specific data needed to establish background levels is rarely available for UST release sites. In addition, many UST sites are located in developed areas where background levels are already elevated and may not be suitable cleanup levels sufficient to protect human health and the environment. Thus, determining appropriate background levels also may be time consuming (for example, background levels used in the regulation of hazardous waste land disposal facilities under Subpart F of the RCRA regulations are based on a year of ground-water monitoring data).

However, as discussed below for Option 2, it may be possible to start longer-term cleanups (e.g., treatment of ground water with dissolved contamination) at some sites before a cleanup levels is established. This is an approach that some states have chosen to implement at selected UST release sites. In EPA's view, therefore, the theoretical advantage of Option 1 in ensuring consistent cleanups will in practice not be achieved and, in any case, is outweighed by potential delays associated with the development and implementation of standards, applicable...
to the large UST regulated community, and the potential for conflict with existing state programs.

Option 2—Site-Specific Standards Based on Risk. The second approach considered by the Agency uses exposure and risk assessment techniques to determine the risk to human health and the environment at each site of an UST release. Under this option, the degree of cleanup sought for contaminated ground water and soil would reflect the site-specific risk presented.

The risk assessment would be based directly on analysis of site-specific conditions and problems posed by the release. Factors to be considered include the quantity of material released; the mobility, persistence and toxicity of the material; the exposure pathways (e.g., drinking water wells); the extent of contamination and its relationship to present and potential ground-water well locations and uses; levels of background contamination; and any relevant standards.

Technology-based decisions would also be possible under Option 2 if: (1) the cleanup level used as the basis for initiating UST corrective action measures is found to be unattainable with current technology; and (2) it is shown that the remaining contamination does not pose a substantial present or potential hazard to human health and the environment; and (3) monitoring procedures are instituted to ensure that the conditions remain stable or improve. Unlike Option 1, there would be no variance because site-specific decisions are made for all sites.

EPA has chosen Option 2 as the preferred approach to setting cleanup levels for longer-term corrective action for petroleum UST releases. Option 2 fulfills the statutory requirements to protect human health and the environment, and it would accommodate the variety of approaches taken in existing state corrective action programs. The risk assessment approach can accommodate the wide range of situations likely in UST releases and does not preclude states from employing a variety of approaches for their state UST programs. In addition, by allowing implementing agencies to seek out site-specific cleanup solutions, the use of Option 2 is expected to minimize the overall regulatory impact on small business owners, as well as reducing costs of compliance for all owners and operators.

The principal concern raised about the use of the risk assessment approach is the potential for delay in starting a cleanup until the initial risk assessment is completed. In this corrective action program, however, the Agency has structured the risk assessment option in a manner that should avoid delay. Owners and operators must initiate immediate abatement actions in response to all releases. Removal of the source of the release, any free product, and any apparent contaminated soil in the excavation zone is required at all sites before the risk assessment process begins.

Secondly, implementing agencies have the discretion to structure the risk assessment process, and would be provided (in guidance documents accompanying this rule) with risk assessment and site investigation methods, so that the time required to carry out an assessment should not be excessive. They also may require owners and operators to begin cleanup actions during the time the risk assessment is being conducted. The Agency intends to provide owners and operators and implementing agencies with a variety of tools in the following technical areas:

- Decision-making in the site investigation and corrective action process;
- Risk assessment procedures for petroleum releases;
- Toxicity values for gasoline and gasoline vapor, including information on exposure;
- Facilitating corrective action decision-making in the field;
- The effectiveness and cost of control technologies;
- The treatment of petroleum-contaminated soil, including present regulations, guidelines, and state-of-the-art technologies, and possible future technologies.

The guidance document on risk assessment procedures would be the key element of a streamlined process designed to complete a risk assessment for petroleum releases within a shortened time frame. Though still under development, these procedures are based upon those found in the Superfund Public Health Evaluation Manual but modified for USTs. For example, they will have been adapted to consider only benzene, toluene, and xylene as indicator chemicals for an unleaded gasoline release. In addition, the modified procedures would restrict consideration of risk to exposures through ground water. The manual would provide the necessary data for the toxicity assessment (i.e., toxicity values are already provided).

In EPA's opinion, the site-specific risk assessment process can be streamlined so that it does not delay corrective actions for petroleum UST releases. Accordingly, EPA believes that the site-specific approach to establishing UST corrective action requirements for petroleum releases is preferred because it will accommodate a variety of state approaches to UST regulation and can be tailored to the diverse circumstances surrounding UST releases.

EPA's selection of a risk-based approach does not mean an inability to accommodate some of the features of a class approach where clean up levels are tied to predetermined classes of environments. For example, the Agency would allow UST corrective action programs to recognize well head protection zones established under the Safe Drinking Water Act if the States elect to establish such zones to protect public drinking water wells. An implementing agency should recognize the existence of these zones and should adjust its risk-based clean up level to match the degree of protection established for these zones.

Besides the predetermined class approach utilizing the well head protection zone, the implementing agency should take into account the exposure to the public in finalizing the clean up levels. If a drinking water supply, either public or private, is affected by a release from a regulated UST system, an owner or operator must expect that a health-based standard will be used as a target for clean up of that release, e.g., for gasoline the Agency is considering the proposed maximum contaminant level for benzene of 5 ppb in drinking water as the appropriate surrogate clean up level. Similarly, if the exposure or risk assessment is used to establish a site-specific clean up level, an owner or operator must expect an implementing agency to choose levels that fall within the excess cancer risk range of $10^{-4}$ to $10^{-6}$ with a departure point of $10^{-6}$. This may mean that the maximum contaminant levels are used as a starting point (and possibly as an end point) for an evaluation of the appropriate clean up level for a drinking water supply. Finally, an owner or operator must expect that environmental concerns (e.g., impact on wetlands, surface waters, etc.) will be considered particularly when present drinking water supplies are not affected.

Option 3—A Predetermined Classes Approach. The third option considered combines the national health-based standard and the site-specific standard approaches. It is based on the use of predetermined classifications of different UST environments, for example, using a classification system based on the use and value of ground water. Alternative approaches for establishing classes are discussed in more detail in V.E. below.
In a ground-water classification system, fragile environments, such as recharge areas for public and private drinking water supply wells, could be classified as "Class A" environments and afforded a high-level of protection by requiring cleanup to specific health-based standards. Similarly, the Agency could incorporate a "Class C" category for areas that require little or no cleanup of releases, such as areas defined as Class III in the EPA ground-water protection strategy. As such, all features of Option 1, described previously, except the risk-based variance, would apply to a release in a Class A environment. An UST release to any environment not classified as Class A or Class C would require corrective action measures sufficient to protect human health and the environment as determined by a site-specific risk assessment. This risk assessment would take the same form as that described in Option 2. An UST release in a Class C environment would receive little or no cleanup beyond Stage I.

In the Agency's view, UST corrective action based on predetermined classes is less workable than a site-specific standard approach. The initial disadvantage is the time required for the implementing agency to develop an appropriate and workable classification system, given the number and diversity of sites and environmental conditions that must be considered. The implementing agency also would have to expend additional time to classify various locations. Although the implementing agency could classify all UST environments in advance or could require owners or operators to begin cleanup actions during the classification process in a manner similar to that described for reducing delay during the risk assessment in Option 2, the necessity to apply classification criteria to the site would interject a step that is not normally required under the site-specific option.

EPA's selection of a risk-based approach does not mean an inability to accommodate some features of a class approach, where clean-up levels are tied to predetermined classes of environments. For example, the Agency will allow UST corrective action programs to recognize wellhead protection zones established under the Safe Drinking Water Act, if states elect to establish such zones to protect public drinking water wells. An implementing agency should recognize the existence of these zones and adjust its risk-based clean-up level approach to match the degree of protection established for these zones.

Another disadvantage of Option 3 is that, even after narrowly drawn classes are developed, Class A requirements may not be achievable in some environments with existing technology. The variance procedures described in Option 1 could be employed to modify class-based cleanup requirements if the standards are not attainable. If the variance procedure employed is based on an assessment of the risk to health and environment presented by site-specific conditions, however, it will be the equivalent of the approach suggested in Option 2. Once again, if the variance procedure must be used in a large number of cases, this approach can be expected to result in only nominal reductions in the number of site-specific cleanup decisions.

2. UST Systems Containing Hazardous Substances

Today's proposed corrective action requirements for UST systems containing hazardous substances are similar to those for UST systems containing petroleum with one significant exception. The removal of free product is not part of the Stage I requirements that apply to all releases. As with UST systems containing petroleum, the hazardous substance corrective action requirements are divided into two stages. The first stage consists of the initial abatement actions that all owners and operators must take in response to a release from a hazardous substance UST. The second stage concerns requirements that specify longer-term corrective action measures that owners and operators must undertake if the implementing agency determines that additional corrective action is required. Review and evaluation of owners' and operators' reports and corrective action plans, and establishment of cleanup requirements is left to the implementing agencies.

In choosing its corrective action approach for hazardous substance UST systems, EPA was influenced by: (1) the need to implement a program at a state or local level at a large number of sites with a diversity of environments; (2) the need to develop a program that reflects the greater complexity and diversity of regulated substances in hazardous substance tanks compared to petroleum tanks; and (3) the need to construct a program that is similar to that for petroleum UST systems, but moves more quickly to those steps where owners or operators collect, array, and assess (along with the implementing agency) the information needed to determine the nature, extent, and hazard of the hazardous substance release. An earlier assessment of the release is considered crucial given the relatively greater hazard and technical complexity of a hazardous substance release. It is expected that such assessments will require a greater investment of time and resources to complete than an assessment of a petroleum release.

The requirements being proposed today to establish corrective action requirements for USTs containing hazardous substances are similar to RCRA hazardous waste tank regulations. They are very similar to the petroleum corrective action regulations with one significant exception: The removal of floating free product is not required at every site under Stage 1. Whereas most petroleum products and some chemical products float on the ground water, many other hazardous substances will sink or will be dissolved readily in the ground water. Free product removal plans for hazardous substance releases must, therefore, consider so-called "sinkers" as well as "floaters." Nearly every other aspect of the corrective action process devised for petroleum tank releases would still apply.

As with the petroleum tank corrective action there is a Stage I versus Stage II distinction in the proposed hazardous substance corrective action program. There are several differences in these two programs, however. Under the hazardous substance requirements for example, containment of any visible release applies solely to an above-ground release. A similar Stage I requirement for a petroleum UST release response applies to both above-ground releases and releases to the excavation zone, that is, subsurface soil excavation is required at this point in the process. In contrast, response to a below ground release under the hazardous substance requirements takes place as part of Stage II. Thus, the dividing line between Stage I and Stage II occurs earlier in the hazardous substance release response than in the proposed petroleum release response process. The hazardous substance corrective action requirements resemble the Subtitle C hazardous waste tank requirements that also restrict initial response requirements for removal of visible contamination and require a corrective action for the cleanup of any remaining contamination. As noted, the Agency believes that moving quickly to consider a Stage II response is appropriate for a release from an UST containing hazardous substances as well and, therefore, has followed the RCRA hazardous waste tank approach. Choosing this approach:
The first stage of the hazardous substance corrective action process concerns immediate steps to abate imminent safety and health hazards whenever a release from a hazardous substance UST is indicated or suspected. To comply with these requirements, the UST owner or operator must: (1) immediately notify the appropriate agency of the possible release; (2) stop the release and remove any remaining hazardous substances as necessary to prevent further release and to allow inspection and repair of the tank system; (3) contain any aboveground release and remove visibly contaminated soil from an aboveground release; and (4) investigate to determine the extent of soil and ground-water contamination.

The owner or operator must also investigate and characterize any free product or any plume of dissolved contamination in the ground water and the extent of any soil contamination. The results of this investigation must be reported to the appropriate implementing agency. The implementing agency will use this information as the basis for determining if the owner or operator will be required to carry out additional steps of the corrective action process for USTs containing hazardous substances.

The corrective action process for both petroleum and hazardous substance UST systems addresses free product removal and longer-term corrective action. If the investigations conducted under Stage I detect free product, the owner or operator may be required to submit and implement an appropriate plan to remove the free product to the maximum extent practicable. Free product removal is included as a second stage activity for hazardous substance releases from USTs due to the greater technical complexity of investigating the extent of free product, and in removing free product to the maximum extent practicable. If an owner's or operator's investigation of a hazardous substance release from an UST indicates that there is dissolved contamination in ground water or subsurface soil contamination, longer-term corrective actions may be required as determined by the implementing agency and specified in a compliance order. EPA considered three regulatory options for establishing longer-term cleanup requirements in the corrective action process for hazardous substance UST systems: (1) National cleanup standards with a variance provision; (2) site-specific standards based on risk; and (3) a predetermined class approach. All three options are currently in use in some form by various states in their UST programs. For a detailed discussion of these options, readers should refer to the section on "Longer-Term Corrective Action Options" for USTs containing petroleum.

As in the case of corrective action measures for USTs containing petroleum, EPA proposes to use the second option, which uses site-specific standards, as the basis for setting cleanup requirements for longer-term corrective action. The Agency has selected this option based upon a comparison of the merits of all three options and an evaluation of state program experience. The rationale for selection of this approach is the same as described in Section V.F.2. of this preamble for USTs containing petroleum. The Agency, however, solicits comments with supporting data on all three options.

3. Public Participation in Corrective Action

RCRA section 7004 provides for public participation in the development, revision, implementation, and enforcement of any regulation, guideline, information, or program under RCRA. Although the statute does not specifically require public participation in individual site clean-up decisions, it is EPA's policy to involve the public in decisions of environmental impact. Because the Agency believes that public participation in the formulation of UST corrective action remedies is both useful to selection of the most appropriate actions and consistent with the expectations of the public, EPA is proposing to include public participation requirements in the regulation for petroleum and hazardous substance underground storage tanks. EPA also expects the owner or operator to comply with existing state requirements for public participation. While some specific proposals for public participation applicable to UST corrective action are included in this rulemaking, EPA solicits comments addressing whether existing state administrative procedures would provide adequate opportunities for public involvement in authorized state UST corrective action programs.

The corrective action process for both petroleum and hazardous substance tanks includes initial abatement requirements that are in the nature of emergency response. Because the Agency believes that the nature of the response greatly limits the opportunity for public involvement in this stage, the proposed public participation requirements address the development and implementation of the longer-term corrective action plan (see Sections 280.75 and 280.84).

Specifically, we are proposing to require notice to the public with an opportunity to comment on all Stage II corrective action plans proposed by the UST owners and operators. This provides both an opportunity for meaningful involvement by the public as well as additional perspectives on the problem and proposed solutions for the implementing agency. Beyond this, we are proposing that whenever a decision is made to terminate a corrective action cleanup prior to completion of the entire approved plan (unable to meet specific standards set in the plan) the implementing agency must allow the public an opportunity to comment on the proposed plan revision.
E. Two-Tiered Regulatory Scheme for Petroleum Tanks; Basis for Determining Class

From the outset, it was recognized that leaks from petroleum UST systems located in certain settings—such as where the ground water is an important source of drinking water—presented a greater potential for both human exposure and costly damages than those located where there is limited or no current use of the ground water. As mentioned in the discussion of options, there was considerable interest in establishing a regulatory scheme that would require more protective requirements for UST systems posing a high risk to human health, such as those located near groundwater used for drinking water, than would be required for the general tank universe.

Under this scheme, the general petroleum UST universe would be subject to the requirements presented in today's rule: corrosion-protected, single-walled systems with frequent to continuous monitoring for new tanks; phasing in of release detection systems for existing tanks in 3 to 5 years (with periodic tank tightness testing and inventory controls allowed as one form of release detection during a 10-year interim period); and upgrading of existing tanks to the new tank standards, or replacement with conforming tanks, within 10 years. For the higher risk locations, however, the new tank standards would require all tank systems to be secondarily contained and provided with interstitial release detection between the tank system and the secondary containment barrier. In addition, existing UST systems would be subject to more rapid upgrading to these new tank standards. The requirements for new and upgraded petroleum tanks in the higher risk class would be comparable to the performance standards being proposed today for new and upgraded hazardous substance UST systems, which provide flexibility in the choice of secondary barriers and interstitial monitoring techniques that can be used. (In the following discussion, the requirements that would apply to petroleum UST systems in the higher risk settings will be referred to as "secondary containment and associated requirements.")

To implement such a two-tiered regulatory program, the Agency would need to determine the criteria for locations that would be subject to the more protective requirements. While the class option is not proposed in today's rule, the Agency seeks comment on the general desirability and feasibility of a class approach as well as specific comments on the approach discussed below regarding criteria for identifying the higher risk class and implementation by the states.

The Agency explored many possible ways to define high risk tank settings based on hydrogeologic factors (e.g., depth to ground water, soil properties, and other site-specific conditions) and/or or ground-water use in the area (e.g., distance to wells). The principal objective was to develop a class approach that would allow easy determination of which requirements applied to a particular tank location. In addition, the Agency wanted to develop an approach that would be compatible with EPA's Ground-Water Protection Strategy as well as with existing state ground-water classification efforts and anticipated state designation of wellhead protection areas under the new Safe Drinking Water Act Amendments. Because of the clear need for a state role in the class approach, the Agency also needed to consider how appropriate state implementation could be assured. The Agency also considered the American Petroleum Institute's "Recommended Practice for Underground Petroleum Product Storage Systems at Marketing and Distribution Facilities" (#1635, Second Edition, December 1984), which in part recommends secondary containment or equivalent protection for new installations where ground water below the facility is within the cone of influence of municipal water supply wells.

With such considerations as background, the Agency is seeking comment on an approach for implementing a two-tiered regulatory scheme which, while not proposed in today's rule, is still under active consideration. The Agency is attracted to the class concept because it could provide significant additional protection at a lower incremental cost to valuable ground-water resources that are most vulnerable to damage. For example, the closer tanks are to ground-water wells, the more likely a release will contaminate the well, necessitating well replacement. Based on public comments received and additional information and evaluation developed over the next few months, this approach could be included in the final rule. To foster public consideration and comments on this issue, the basic approach is briefly summarized below, followed by a more detailed discussion of key aspects of the approach.

Summary of the Basic Approach

EPA would establish minimum criteria for locations that are subject to the secondary containment and associated requirements based principally on use of the ground water, possibly taking hydrogeologic considerations into account. Each state seeking approval to operate in lieu of the federal program would be required to submit a plan to EPA demonstrating that the secondary containment and associated requirements will apply to all of the locations in the state meeting EPA's criteria. States might be given the choice of three alternative methods for delineating the areas where the more protective requirements would apply: (1) areas meeting EPA's criteria for Class I ground water as defined in EPA's Ground-Water Protection Strategy (1984); (2) wellhead protection areas designated by the state under an EPA-approved program as provided for in the 1986 amendments to the Safe Drinking Water Act; or (3) a state-developed classification scheme as long as it resulted in the more protective requirements being applied at least to the locations meeting EPA's criteria for Class I. (Instead of using Class I criteria as minimum criteria for defining higher risk locations, EPA might choose other criteria, such as a minimum distance around public supply wells or a definition of higher risk locations.) In states that fail to submit and receive authorization of their UST systems under Section 9004, all UST systems located within a specified distance of all public water supply wells (or wells serving a substantial population as defined in EPA's Ground-Water Protection Strategy) would be required to meet the secondary containment and associated requirements.

The Criteria for High Risk Locations

To provide flexibility to the states and build on continuing efforts to identify ground water needing special protection, the above approach offers alternative ways that states may identify the areas where the secondary containment and associated requirements would apply:

1. States could choose to use EPA's criteria for Class I ground water, defined in EPA's Ground-Water Protection Strategy as "ground water that is highly vulnerable to contamination and either irreplaceable source of drinking water to a substantial population or ecologically vital." Guidelines for classifying ground water under EPA's Strategy, published for public comment in December 1986, further refine this definition and provide a methodology for determining the class of ground water.
water near a specific source of potential releases to ground water.

Since the Guidelines methodology is designed for site-by-site classification and is based on collection and analysis of information pertinent to a specific source, EPA could develop a simplified method for determining Class I ground water on an area-wide basis. Rather than develop the extensive data needed to show high vulnerability and irreplaceability, states could choose to designate all tank locations within two miles of ground water supplying a substantial population (e.g., more than 2,500 people served by a public water supply). This simplification, the Agency believes, would make it easier for states selecting this alternative method to identify the areas meeting the criteria.

Generally, choosing this alternative would result in the smallest number of areas being designated for the secondary containment and associated requirements. Based on information in EPA's Federal Reporting Data System (FRDS), approximately 15 percent of the public water systems using ground water as a principal source of supply serve a population of over 2,500; however, these systems serve more than 80 percent of the population whose public water systems use ground water. Designated areas where the secondary containment and associated requirements would apply would, based on preliminary estimates, encompass less than 5 percent of the nation's land area.

2. The second alternative states could choose would be to apply the more protective requirements in wellhead protection areas designated by the states under an EPA-approved plan as provided for in the 1986 Safe Drinking Water Act (SDWA) amendments. Under this new program, states will be submitting state programs to EPA for designating and developing programs to protect wellhead areas around public water supply wells. Under the SDWA, EPA will publish guidelines for delineating wellhead areas and for state grant approval. In June 1987, States are expected to submit grant applications for program development in 1988.

States choosing this alternative would be taking advantage of the new wellhead protection program as a means for providing extra protection from leaking tanks to all public water supply wells. According to FRDS, there are approximately 47,700 public water supply systems using ground water, excluding non-community (e.g., non-residential) and seasonal use (e.g., campground) systems. Preliminary estimates indicate that approximately 10 percent of the land area in the nation would be encompassed by this alternative.

3. States with their own state ground-water classification systems could choose to apply the secondary containment and associated requirements in the areas they have identified as needing special protection. A number of states have already developed such classification systems, and nearly all states are developing ground-water protection strategies which include an effort to identify their most important ground-water resources.

For states choosing this alternative, EPA would review the state's plan for using the classification system as a means for implementing the more protective tank program requirements, and approve those state plans which would result in the secondary containment and associated requirements being applied to at least those locations meeting EPA's criteria for Class I (or whatever minimum criteria EPA might choose for defining the more protective class). Since EPA's Class I is a very small and tightly drawn class, it is expected that most states with existing systems for identifying important ground-water resources should meet this requirement.

Private Wells. During the development of the two-tiered regulatory approach described above, the Agency also considered whether secondary containment and associated requirements should also apply to UST systems located near private drinking water wells. These wells are of concern because they number about 13 million and because over 90 percent of all wells contaminated in release incidents are private water supply wells. The Agency believes that fewer than 20 percent of all tanks are close to private or public drinking water wells.

The Agency does not contemplate including them in the high risk class discussed above, however, for several reasons. Private wells are not regulated under Federal statute, and States vary in the degree to which they regulate private wells. The exact location of private wells is often difficult for the UST owner and the implementing agency to determine which set of requirements applied to a particular UST location.

If the Agency did include tanks near private wells in the high risk class, the distance from the tank to these wells may or may not be the same as for public water supply wells, which typically draw larger volumes of water. EPA believes, based on available historical data concerning petroleum releases from UST systems, that in excess of 90 percent of contamination incidents could have been avoided if the distance were 500 feet and that over 90 percent of incidents could have been avoided if a 1,000-foot distance were chosen.

The Agency believes that the risks presented by UST systems in these settings may be adequately addressed by the basic requirements and may not warrant the additional costs to the individual UST owner and to the administering agency that would result from extending the secondary containment and associated requirements to UST systems near private wells. The Agency does, however, seek comment on whether UST systems near private wells should be subject to these requirements if the Agency proceeds with a two-tiered regulatory approach, and, if so, what size of protected area adjacent to private wells would be appropriate. The Agency also seeks comment on how implementation might be achieved given the practical problems described above, as well as on whether the decision to place additional requirements on UST systems located near private wells should be left to the States.

Required Use of Distance to Well Criteria in States Without Approved Plans

Because states vary in the degree to which they have delineated or plan to delineate areas where the ground water needs special protection, EPA's two-tiered approach could include the requirement that the secondary containment and associated requirements would apply in higher risk settings in those states without an approved program under Section 9004. In states that fail to gain program approval, the secondary containment and associated requirements must be required to take effect at any tank system located within a specified distance to a public water supply well or a well supplying a substantial population (Class I). EPA believes that such an automatic federal requirement is essential: (1) To assure that higher risk settings in all states receive a higher degree of protection; and (2) to encourage states to develop and implement their own plans to protect their public water supply wells.

The Agency recognizes that any specified distance selected may under- or over-protect in varying hydrogeologic settings. Therefore, the Agency is seeking comment on what the specified distance to the well should be. The Agency has identified several possible alternatives for the distance to wells that could be specified. The Agency is
also seeking comment on whether such a requirement should apply to all public supply wells or just those supplying a "substantial population" as that term is used in EPA's ground-water protection strategy for Class I ground-water.

One alternative distance to wells might be to specify a 2-mile radius around public water supply wells. The 2-mile distance is based on an analysis of contaminant plume lengths, distances to surface water, and pumping well capture zones. This statistical analysis was performed for the development of EPA's Ground-Water Classification Guidelines to determine how large an area would need protection from a potential source of ground-water contamination. The 2-mile distance was shown to be protective in more than 90 percent of the situations analyzed. Another possible distance is 1,600 feet from a public water supply well. This distance is based on an analysis of 156 known petroleum groundwater contamination incidents. Seven of these incidents threatened municipal well systems with releases from leaking petroleum underground storage tanks. According to this analysis, none of the releases travelled a distance greater than 1,600 feet before being discovered. The 2-mile distance has the advantage of being based on analysis of a broad spectrum of releases in a wide variety of hydrogeologic settings. The 1,600-foot distance is based on known plume lengths only, but has the advantage of representing distances that petroleum products actually travelled before discovery as a result of an UST system release.

The Agency is seeking comment on the appropriateness of these (and other suggested) distances in identifying where the secondary containment and associated requirements will be imposed in states prior to receiving approval of their plans. The Agency also seeks comment on whether and how to establish different automatic distances to wells for varying sizes (e.g., pumping rate, population served) of public water supply wells.

State Implementation Plans

A central ingredient of this two-tiered class approach is the state's development, submission, and EPA approval of a plan for implementing the secondary containment and associated requirements in higher risk settings. EPA would review the plans as part of the state program approval process for the UST program. Tank owners in states failing to receive approval of a state plan to protect higher risk settings would be subject to the federal secondary containment and associated requirements if they are located within the specified distance to wells established by the EPA regulations. EPA is also seeking comment on the state plan submission and approval process as a critical element of the overall approach.

VI. ANALYSIS OF TODAY'S PROPOSED RULE

A. Program Scope

1. Applicability

As described previously, today's proposed rulemaking generally applies to all owners and operators of "underground storage tanks" (UST systems) containing "regulated substances." Exclusions from this rulemaking and UST systems for which regulation is deferred are discussed in the following sections. UST systems are defined as any one or combination of tanks (including any attached underground piping) used to contain an accumulation of regulated substances. To be considered "underground," the tank must have at least 10 percent of its volume beneath the surface of the ground, including pipes attached to the tank. Section 9001 of Subtitle I, however, expressly excludes the following:

- Farm and residential tanks having a capacity of no more than 1,100 gallons used for storing motor fuel for non-commercial purposes;
- Tanks storing heating oil for consumptive use on the premises where stored;
- Septic tanks;
- Pipeline facilities (including gathering lines) regulated under the Natural Gas Pipeline Safety Act of 1968 or the Hazardous Liquid Pipeline Safety Act of 1979. Also excluded are intrastate pipeline facilities regulated under state laws comparable to the provisions of these two Acts;
- Surface impoundments, pits, ponds, and lagoons;
- Storm water or wastewater collection systems;
- Flow-through process tanks;
- Liquid traps or associated gathering lines directly related to oil or gas production and gathering operations; and
- Storage tanks situated on or above the floor of underground areas (such as basements, shafts, or tunnels).

"Regulated Substances" is defined in Section 9001 of Subtitle I as: (1) Any substance defined in Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA) as a hazardous substance, except substances regulated as hazardous wastes under Subtitle C of the Solid Waste Disposal Act; and (2) petroleum, including crude oil or any fraction thereof, which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute). The list of CERCLA hazardous substances is codified at 40 CFR Part 261. This list contains both commercial chemicals and discarded commercial chemical products. The Subtitle I program only covers those hazardous substances that are not hazardous wastes (except for petroleum wastes). This list was amended in a final rule published on September 28, 1986 (51 FR 34534).

The Agency proposes to apply requirements for hazardous substance UST systems only to underground tank systems containing a mixture of petroleum and hazardous substances in which hazardous substances comprise the principal components of the mixture. The Agency is interested in commenters' views on the feasibility (especially for a testing method) of using a concentration threshold to determine when such a mixture would be regarded as principally petroleum or principally hazardous substance, and, therefore, subject to the respective requirements. The Agency recognizes that several petroleum products (e.g., gasoline) are themselves comprised of hazardous substance constituents (e.g., benzene, toluene, xylene), but regards these as petroleum to the extent these substances are present in levels normally found in raw or refined petroleum fractions. The Agency requests comments on the frequency of, problems with, and suggested approaches to requirements for UST systems containing both a petroleum product and a regulated hazardous substance. The Agency believes that the largest group of such tanks contains water to which hazardous substances have been added (e.g., solvents).

A number of the definitions that the Agency is proposing today have already been presented in a guidance document issued by EPA on April 7, 1988 to assist the regulated community in complying with the Subtitle I notification requirements.
sections describe EPA's reasons for selecting the proposed deferrals, exclusions and definitions and asks for public comment.

2. Exclusion for Tanks Regulated Under Subtitle C

Underground storage tanks that contain a mixture of hazardous wastes (regulated under Subtitle C) and hazardous substances (regulated under Subtitle I) are subject to overlapping jurisdiction of Subtitles C and I. EPA is proposing today to exempt these tanks from Subtitle I regulation. The Agency believes that this is consistent with congressional intent not to have overlapping requirements evidenced by the Subtitle C exclusion within the definition of "regulated substance." Because of the coverage of these tanks by Subtitle C, the exemption of these tanks will not present a risk to human health and the environment.

3. Deferral of Regulation

Today, the Agency is deferring the proposal of certain requirements for the following categories of UST systems: wastewater treatment tanks, sumps, UST systems containing used oil, underground bulk storage tanks, UST systems containing radioactive waste, UST systems containing electrical equipment (e.g., vaulted transformers and buried power cable conduits), and hydraulic lift tanks. For these tanks, EPA is deferring the proposal of the technical standards set forth today in Subparts A, B, C, D, E, H, and I. EPA is proposing, however, that these tanks be subject to the interim prohibition for new tank systems (today proposed to be redesignated Section 280.11) and corrective action requirements as set forth in Subparts F and G.

a. Wastewater Treatment Tanks

Under the definition of "storm water or wastewater collection systems" that is proposed by the Agency today, wastewater tanks in which treatment is designated to occur would not be exempt from regulation under Subtitle I. Wastewater treatment tanks have been exempted from Subtitle C regulation (40 FR 79074). Elementary neutralization tanks are also temporarily exempted from Subtitle C regulation. The Clean Water Act regulates discharges from tanks containing hazardous wastes or hazardous substances into surface waters but does not regulate the tanks themselves. This means that hundreds of thousands of in-ground tanks that hold wastewater at treatment facilities, including publicly owned treatment works, are now subject to UST jurisdiction.

Also subject to UST jurisdiction are thousands of oil/water separators, which exist at nearly every oil refinery in the United States and many other industrial facilities. These devices are primarily used to separate oil from wastewater and can be considered treatment tanks.

The Agency has considered regulating these tanks under today's proposal. EPA believes, however, that the proposed standards may not be appropriate for these tanks. Thus, EPA is proposing to defer regulation of wastewater treatment tanks and similar apparatuses such as oil water separators until special standards for these tanks can be developed. The Agency requests public comment on the appropriateness of applying the requirements being proposed today to these wastewater treatment tanks.

b. Sumps

Under the definition of "tank" that the Agency is proposing today, in-ground sumps would be considered UST systems. According to an industry survey of sumps, there is an estimated 500,000 sumps in the oil and gas industry alone. Typically constructed of cement, these range in size from 55 gallons to 2,100 gallons. (Less than 20 percent of the sumps fall in the 1,260-2,100 gallon range and these are associated with oil and gas wells; thus, they are excluded under the definition of liquid traps. The remainder of sumps range from 55 to 1,260 gallons.)

Sumps in the oil and gas industry are primarily installed and maintained for pollution abatement purposes. Their contents are pumped out and returned to production facilities. As a general practice, wells and production battery sites are inspected daily by production company employees.

Sumps have been linked to a number of groundwater contamination cases. The state of California, relying on studies of groundwater contamination incidents in the Santa Clara Valley, has concluded that sumps should be regulated under that state's UST program. Sumps that contain hazardous wastes are regulated under Subtitle C. Under Subtitle C, sumps are defined as "any pit or reservoir that meets the definition of tank and those troughs/trenches connected to it that serve to collect hazardous waste for transport to hazardous waste storage, treatment or disposal facilities." Certain sumps, however, have been excluded from the secondary containment requirements for hazardous waste tanks, namely sumps that serve as part of a secondary containment system to collect or contain releases of hazardous wastes.

The Agency is considering regulating sumps containing regulated substances and requiring owners of these devices to meet the Subtitle I technical standards. EPA is uncertain at this time, however, whether the requirements proposed today are appropriate for these devices. Thus, the Agency has decided to defer proposing technical requirements for these devices at this time. The proposed corrective action requirements, however, would apply to these tanks. The Agency solicits comment on whether special standards should apply to sumps containing regulated substances. EPA also solicits information on (1) the number, location, and substances stored in sumps; (2) how they are protected to prevent releases to the environment from occurring; (3) their leak history; and (4) whether the requirements being proposed today would be appropriately applied to sumps. In the absence of comments and information gathered before final regulations indicating that the proposed requirements are not appropriate for sumps, EPA may determine that the requirements proposed today are appropriate for sumps and would then make the final regulations applicable to them.

c. Underground Bulk Storage Tank

The regulations that the Agency is proposing today were developed to address the majority of tanks in the UST universe. Most of the technical regulations apply to relatively small UST systems of less than 20,000 gallon capacity. Tanks of very large capacities, however, are in use and within the jurisdiction of Subtitle I. The large capacity tanks are sometimes referred to as underground bulk storage tanks (UBSTs). UBSTs are generally located at defense facilities and contain primarily petroleum products, such as jet fuels, motor gasolines, aviation gasolines, and fuel oils. However, such tanks are occasionally used to contain other substances. For example, according to California's inventory of UST systems, two tanks were listed as containing butyl acetate with a combined capacity of 200,000 gallons. The inventory also lists 29 tanks containing potassium hydroxide with a total capacity of 1,032,485 gallons for an average capacity of 35,600 gallons. The majority of UBSTs can be grouped into three categories: 20,000 to 50,000 gallon tanks made of steel or fiberglass that are shaped like smaller UST systems (horizontal cylinders); 50,000 to 1,000,000 gallon bulk tanks made of steel or concrete, usually shaped like vertical cylinders; and 2,100,000 to 3,300,000 gallon bulk tanks.
made of concrete and shaped like vertical cylinders. The 20,000 to 50,000 gallon horizontal UBSTs are often located on airport flight lines or refueling stations for ground vehicles. The larger vertical UBSTs are used for storage at terminals, other major distribution and supply centers, and for high volume industrial purposes. In addition, the larger vertical UBSTs are fabricated at the storage facility.

While there are no exact inventories of these tanks, it has been estimated that approximately 30,000 tanks with a capacity greater than 20,000 gallons are located at defense facilities of all the services. Approximately 10 to 15 percent of these tanks are expected to have capacities exceeding 2 million gallons.

EPA does not have a complete understanding of the design, construction, fabrication and installation processes associated with these tanks. The Agency is concerned that today's proposed requirements for design and construction, installation and leak detection, in particular, may not be appropriate for these tanks. Comment is sought regarding appropriate practices for design and construction, installation, leak detection and other regulatory concerns related to these tanks. For example, tightness testing is believed to be an unreliable technology for UBSTs. The "noise," or level of interferences, increases with increasing product volume, so that it becomes progressively more difficult to detect a particular threshold leak rate (e.g., 0.10 gallons per hour). In addition, the concrete-type tanks cannot be overfilled for testing because of the lid design. Also, little is known about the application of external leak detection to UBSTs. In theory, these methods should work for these tanks; however, due to the difficulty of establishing appropriate monitoring points, effectiveness of external leak detection devices may be questionable. Inventory control is subject to many of the same interferences that affect tightness testing and may not be a feasible release detection technique in UBSTs as well.

Because of all the above concerns about the applicability or appropriateness of today's proposed standard for UBSTs, EPA is evaluating whether only secondary containment may provide the necessary protection for human health and the environment. However, the Agency does not have sufficient information on the effectiveness or costs associated with secondary containment of UBSTs. Comment is sought on the appropriateness of this approach as well.

as alternate release detection approaches that would be effective. Given the factors presented above, EPA proposes today to defer applicability of today's proposed technical standards to UBSTs. (The proposed corrective action requirements of Subparts G and H, however, would apply to these tanks). For the purpose of this deferral, UBSTs are defined as tanks that are approximately 20,000 gallons or larger (they encompass steel, FRP and concrete tanks) that are field-fabricated, vertical cylinders, because of their size. The Agency is considering the use of secondary containment for all such tank systems and may require it for UBSTs instead of the standards for USTs proposed today. EPA solicits information on (1) the number, location, and substances stored in such tanks; (2) how they are protected to prevent releases to the environment from occurring; (3) the leak history; and (4) applicability and appropriateness of each of the proposed technical regulations for these tanks. Again, if EPA determines that either the requirements being proposed today or secondary containment are appropriate for these tanks, it will make the final rule applicable to them. Comment is requested on this issue.

d. UST Systems Containing Radioactive Waste and Other Radioactive Materials

UST systems that contain high-level radioactive waste or other radioactive materials, e.g., low-level radioactive cooling waters, that are not regulated under Subtitle C are regulated under Subtitle I because their contents are considered CERCLA hazardous substances. The Department of Energy (DOE), which manages high-level radioactive waste, has established a program for the management of its tanks which includes detailed design, operation, maintenance, detection, monitoring, and recordkeeping procedures as well as corrective actions that must be taken in the event of a release. These tanks typically have a capacity of 1,000,000 gallons and contain a variety of high-level radioactive liquids and precipitates. The newer tanks are constructed of double-walled steel and are encased in 18 to 22 inches of concrete.

All UST systems containing high-level radioactive waste are owned by the DOE. The UST systems are located at facilities at Savannah River, South Carolina, Idaho, and Hanford (Richland), Washington. The facility at Hanford, Washington, is being reviewed under the National Environmental Policy Act for the "Disposal of Hanford Defense High Level, Transuranic and Tank Wastes" (DOE-EIS-0113).

Due to the unique nature of the materials stored in tanks, the special operations required in handling them, and the size of the storage tanks, several of the proposed standards are not applicable to these tanks. The EPA has considered developing a separate set of standards that apply to these tanks only. This may be unnecessary for tanks containing high-level radioactive waste in view of the fact that the DOE already has a program in place that adequately addresses, and sometimes exceeds, the proposed requirements for the average UST system. Thus, EPA is deferring the proposal of technical requirements for tanks containing radioactive materials, including high-level radioactive waste, pending receipt of public comment on the issue of whether tanks should meet the proposed standards or separate standards. (The proposed corrective action requirements of Subparts F and G, however, would apply to these tanks.)

e. UST Systems Containing Electrical Equipment

Under the proposed definition of "tank," large numbers of utility units could qualify as tanks. Buried power cable conduits are an example of such units. In urban areas, high tension power cables are encased in piping that acts as a conduit. The piping is typically constructed of stainless steel and covered with a semastic coating to prevent corrosion. It contains dielectric fluid which is used to keep the electrical cables cool. The pressurized piping system includes one or more reservoirs which are generally located above ground through which the dielectric fluid continuously circulates and is pumped back through the system. Also located in urban areas are transformers for large trunk lines. These transformers are located underground and contain dielectric fluid.

EPA believes that attempts to include these structures in the UST program would be impractical from an administrative point of view. Thus, EPA is proposing to defer application of technical requirements to these units until it can assess the necessity of their regulation. (Today's proposed corrective action requirements in Subparts F and G, however, would apply to these tanks.) The Agency requests comment on whether and to what extent such units should be regulated in the UST program. In addition, to determine the scope of the universe of these units as well as the magnitude of environmental impacts from release incidents EPA
solicits the following information: (1) the number, location, and substances stored in such units; (2) how they are protected to prevent releases to the environment from occurring; (3) the leak history; and (4) applicability and appropriateness of each of the proposed technical regulations for these tanks.

f. Hydraulic Lift Tanks

Under the definition of tank that the Agency is proposing today, reservoirs of fluid used in hydraulic lifts at service stations and similar devices such as lubricating oil reservoirs of elevators would be subject to Subtitle I regulation. Businesses that are involved in automotive service and repair often use in-ground hydraulic lifts to raise and lower automobiles in order to facilitate service and repair work. These lifts are designed to utilize a compressed air/hydraulic fluid system and hold between 27 and 75 gallons of hydraulic oil, with the average being 42 gallons. It has been estimated that there are between 350,000 and 750,000 underground hydraulic lift tanks in this country. Added to this are hundreds of thousands of lubricating oil reservoirs of elevators that are found in almost every multi-story building in the country.

EPA is proposing today to defer the application of its proposed technical standards to such tanks. (Today's proposed corrective actions requirements under Subparts F and G, however, would apply to these tanks.) The Agency requests comments on whether such units should be regulated, and, if regulated, to what extent. To include these tanks in the UST program could overwhelm the regulatory capacity of EPA and the states and lead to a less successful program in terms of protection of human health and the environment. Based on preliminary data that the Agency has collected concerning hydraulic lift tanks, EPA believes that these tanks pose a minimal risk to the environment. If these tanks leak, the machinery stops working. Leak detection and abatement therefore occurs automatically. Furthermore, most of the UST requirements being proposed today would not be applicable to hydraulic lift tanks. These tanks are pressurized and can only be monitored indirectly, i.e., using vadose zone or ground-water monitoring wells. Thus, monitoring of these tanks would require that wells be drilled through the floors of potentially hundreds of thousands of auto repair shops, multi-story buildings with hydraulic lift operated elevators, and factories that use hydraulically powered equipment. The Agency believes that regulation of such tanks represents a cost to the regulatory agencies and the regulated community that bears no relationship to the environmental protection to be gained.

4. Definitions

a. Definitions of Terms Used in the Statute

(1) Underground Storage Tanks. Underground storage tank is defined in the statute as any one or combination of tanks (including underground pipes connected thereto) that is used to contain an accumulation of regulated substances. To be considered "underground," the tank must have at least 10 percent of its volume, including the volume of pipes attached to the tank, below ground.

Today's proposal sets forth the following definitions for terms used in the statutory definition of underground storage tank:

(a) Tank is a stationary device designed to contain an accumulation of regulated substances and is constructed of non-earthed materials (e.g., concrete, steel, plastic) providing structural support.

The basis of this definition is the definition of tank under Subtitle C of RCRA (40 CFR 260.10). One advantage of borrowing this definition is that it is one with which many members of the regulated community will be familiar. A potential disadvantage of this definition is that it is so broad that literally hundreds of thousands of devices not traditionally regarded as underground storage tanks—but which contain regulated substances for operational or treatment purposes—would be considered tanks. Thus, under the proposed definition, treatment units (such as oil/water separators, traps and interceptors) and equipment and machinery that contain petroleum or other regulated substances for operational purposes (such as vaulted electric transformers and hydraulic lifts) would be subject to regulation.

Similarly, underground sumps and drip collection devices could be considered tanks.

EPA has also considered revising the definition of tank to incorporate the concept of storage into the definition to distinguish those tanks which are used to store regulated substances from those which use, treat, or capture regulated substances. The Agency rejected this alternative, however, because it did not have sufficient data on which to base an appropriate definition of "storage" for Subtitle I purposes.

Subsequent to the issuance of the April guidance, a number of people have contacted EPA and have asserted that EPA should revise the definition of "tank" to clarify that devices such as those mentioned above would not be
subject to regulation under Subtitle I. They argued that attempts on the part of EPA to include these structures in the UST program will not only create chaos in the regulated community but will also damage the Agency's ability to administer the UST program.

Many of the people who contacted EPA owned tanks that could be categorized in one or more of the following ways: (1) tanks with a small capacity; (2) tanks that hold small concentrations of a regulated substance; and (3) tanks that store a regulated substance for a short period of time.

Except to the extent the statute applies only where there is an "accumulation of regulated substances," the statutory definition of "underground storage tank" and its exclusions do not provide an exemption for such tanks. Thus, any underground storage tank that contains regulated substances for any period of time, even small amounts, is within the jurisdiction of Subtitle I. However, although there is no legislative history providing a basis for defining "accumulation of regulated substances," as a jurisdictional matter, EPA believes that the statutory language of Section 9001(a) and Section 9003(b) which allows EPA to distinguish on the basis of the size of the tank provides flexibility for EPA to exclude by regulation tanks that accumulate small amounts of regulated substances.

Given the potentially overwhelming UST universe that results from the statutory definitions, EPA must balance several factors to provide maximum protection of human health and the environment. On the one hand, EPA is responsible under Subtitle I to establish a program that minimizes the adverse impact of mismanagement of small quantities of regulated substances stored in underground storage tanks. Even small quantities of some regulated substances may pose serious dangers to human health and the environment. On the other hand, the Agency must focus its limited resources on the most serious potential hazards associated with leaking underground storage tanks.

Various states and localities have different minimum tank size exemptions in their regulations. Several states and localities have selected a minimum tank size of 110 gallons or less capacity used for storing motor fuel for non-commercial purposes. Other states/localities, such as Louisiana, Florida, Wisconsin, and Suffolk County in New York, have minimum tank sizes below which a tank is exempt, but these tank size cutoffs vary from 60 to 1,100 gallons.

The Agency has also considered creating a de minimus regulatory exclusion for certain categories of tanks, namely (1) small tanks (e.g., less than 110 gallons or less than 500 gallons); (2) tanks that contain a small concentration of regulated substances (e.g., less than 0.1 percent); and (3) tanks that contain regulated substances for a short period of time (e.g., less than 24 hours or less than 48 hours). On the basis of preliminary data indicating that inclusion of smaller tanks (e.g., less than 110 gallons) could jeopardize the effectiveness of its Subtitle I program, the EPA plans, to exclude de minimus quantity tanks in the future. However, today, the EPA is not proposing a regulatory exclusion due to lack of specific information.

EPA solicits comment on the proposed definition of tank. The Agency also solicits comment on the potential categories of regulatory exclusions discussed above as well as data to support such regulatory exclusions. Specifically, the Agency requests data on the following: (1) Amount of substance and residence time the Agency should consider for a regulatory exclusion; (2) supporting data on the level of risk that such tanks pose; (3) the approximate number of such tanks; (4) the types of tanks; (5) whether the requirements being proposed today would be appropriately applied to such tanks; (6) whether such tanks should be exempted on a conditional basis, and what conditions should be met.

(b) Underground pipes connected thereto means all underground piping, including valves, elbows, joints, flanges, and flexible connectors attached to a tank system through which regulated substances flow. For the purpose of determining how much piping is connected to any individual UST system, the piping which joins UST systems should be allocated equally among them.

The definition of connected piping addresses two issues: where the connected piping begins, and how the connected piping should be allocated among tanks. To be consistent with the RCRA Subtitle C tank rules, the starting point of the "connected piping" is the point at which the regulated substance is introduced into the system.

Today's proposed definition has been clarified since issuance of the April guidance to expressly indicate that only underground piping is included in the definition of an UST.

(c) Regulated Substance. (1) Petroleum, including crude oil or any fraction thereof, means crude oil, crude oil fractions, and refined petroleum fractions, including gasoline, kerosene, heating oils, and diesel fuels. The definition of this term was adopted from EPA's interpretation of the term "petroleum" under CERCLA which defines petroleum under Section 101(14) in a manner substantially the same as Subtitle I. Use of this interpretation eliminates any potential inconsistency with CERCLA.

(2) Hazardous substance is any substance defined in Section 101(14) of CERCLA other than any substance regulated as a hazardous waste under Subtitle C of the Solid Waste Disposal Act (RCRA).

(d) A tank is 10 percent or more beneath the surface of the ground if its volume (including the volume of its connected underground piping) is 10 percent or more beneath ground surface or otherwise covered with material so that physical inspection is precluded. This definition reflects the intent of the UST regulations to govern tanks which could leak directly into the ground undetected. Thus, the following types of tanks are included in the UST jurisdiction: tanks that are underground, underground open-top tanks, and tanks that are covered with ground material (for example, to comply with local fire codes).

The April guidance also included tanks which are "10 percent or more below grade" even if not covered by ground material. A tank whose volume is less than 10 percent beneath the surface of the ground and that is below grade but not covered with ground material, such as a tank in a ditch or natural depression, is not included in today's proposal because it is not substantially different from an above ground tank.

The definition of underground storage tank excludes nine types of tanks that would otherwise be subject to UST regulation.

(2) Farm or Residential Motor Fuel Tank Exclusion. The first group of tanks excluded by the statute is "farm or residential tanks of 1,100 gallons or less capacity used for storing motor fuel for non-commercial purposes." The proposal sets forth the following definitions for the key terms of this exemption:

(a) A farm tank is a tank located on a tract of land devoted to the production of crops, or raising animals, including fish, and associated residences and improvements. To be exempt from UST jurisdiction, a farm tank must be located on the farm property. "Farm" includes
fish hatcheries, rangeland and nurseries with growing operations.

"Farm" does not include laboratories where animals are raised, land used to grow timber and pesticide aviation operations. Moreover, this definition does not include retail stores or garden centers where the produce of nursery farms is marketed and where plants and related items are sold.

In developing this definition, EPA has reviewed definitions currently used by other offices within EPA, the Internal Revenue Service, the Department of Agriculture, and the Bureau of the Census. The Agency also reviewed definitions currently used by a number of states. This review has indicated that there is no standard treatment of the term "farm".

EPA considered adopting the definition of farm that is used by the State of California. California defines farms as "a place of agriculture which has annual sales of agricultural products of $1,000 or more." The Agency rejected this definition because of the difficulty of its application. It would require that the economics of each potential "farm" be evaluated before determining whether its small motor fuel tanks fall within the jurisdiction of Subtitle I.

The basic rationale for EPA's interpretation of "farm" is that, because Congress did not indicate, either in the statute or the legislative history what it intended by "farm" the Agency has chosen to interpret farm in the ordinary, every day sense of the word.

(b) Residential tank is a tank that is located on property used primarily for dwelling purposes. Thus, under the proposed definitions, a private school storing motor fuel on site for school buses would not be excluded from UST jurisdiction because the primary use of the property is not residential.

It is important to note that Congress has mandated EPA, under Section 9009 of Subtitle I, to study small farm and residential motor fuel tanks (less than 1100 gallons). In November 1987 EPA will present the results of this study to Congress along with the Agency's recommendations on whether such tanks should be regulated.

(c) Motor fuel is a petroleum-based fuel used in the operation of an engine that propels a vehicle for transportation of people or cargo. Therefore, motor fuel refers to motor gasoline and diesel fuel used in a vehicle for transportation purposes.

Limitations inherent in this definition raise several issues with respect to which EPA solicits comment. First, this definition includes only gasoline and diesel fuel, not other types of fuel such as gasohol. Second, "motor fuel" is limited to substances stored in the tanks used to power motor vehicles. Another option would be to exclude tanks containing gasoline and diesel fuel even if their contents are not used to run motor vehicles. Under this approach, tanks storing gasoline at emergency generators would be exempt.

(d) Noncommercial purposes means not for resale. The definition is limited to motor fuel that is not for resale and that is stored on farmland or residential property. Tanks at gas stations located on "residential" or "farm" property as defined above are not excluded because the motor fuel is stored for resale.

(3) Heating Oil Tanks Exclusion. The second group of tanks excluded from UST jurisdiction by statute is tanks used for storing "heating oil for consumptive use on the premises where stored." Today's proposal sets forth the following definitions for key terms of this exclusion:

(a) Heating oil refers to a type of fuel oil that is one of the eight technical grades of heating oil. These grades are: No. 1, No. 2, No. 4—light, No. 4—heavy, No. 5—light, No. 5—heavy, No. 6, and residual. Heating oil also refers to fuel oil substitutes such as kerosene and diesel when used for heating purposes.

With respect to fuel oil, the lower the grade numbers, the thinner the oil, and the more easily it evaporates. A high number indicates a relatively thick, heavy oil. No. 1 and No. 2 fuel oils are usually used as domestic heating oil and for moderate capacity commercial-industrial burner units. The other grades of fuel oil are used extensively in industrial plants in the production of electric power, space heating, and other purposes. The No. 5, No. 6, and residual fuels are very viscous liquids which typically must be pre-heated prior to burning.

The Agency has considered narrowing this exclusion to include only petroleum products that are one of the eight technical grades of fuel oil. Under this alternative, tanks containing kerosene or diesel used as a substitute for fuel oil would be regulated under Subtitle I although they are almost identical in their chemical makeup to fuel oil nos. 1 and 2. EPA solicits comment on this issue.

(b) Consumptive use means burned on the premises. This exclusion would apply to both residential and commercial heating oil tanks whether they are used for space heating or for producing steam to run generators. The heating oil exclusion does not apply to the storage of heating oil for resale, marketing, or distribution. However, "consumptive use" is not intended to be limited to space heating purposes only.

(c) On the premises where stored means tanks located on the same property where the stored heating oil is used. Tanks should be excluded as long as the oil is stored anywhere on the same property. "On the premises" is not limited to the building where the heating oil is stored. Thus, centralized heating units using heating oil that serve more than one building on the same property would be excluded.

(4) Septic Tank Exclusion. The third exclusion covers any "septic tank." A septic tank is defined in today's proposal as a water-tight covered receptacle designed to receive or process, through liquid separation or biological digestion, the sewage discharged from a building sewer. The effluent from such receptacles is distributed for disposal through the soil. Settled solids and scum are pumped out periodically and hauled to a treatment facility for disposal.

This definition of septic tank is based on common engineering usage. The legislative history of the septic tank exclusion indicates that Congress intended this exclusion to apply to all septic tanks, not just residential tanks.

In addition, "septic tank" has been interpreted to include other tanks closely related to the septic tank within a septic system, such as a distribution box, dosing tank, and grease trap, which typically are part of a subsurface disposal system.


Today's proposal defines pipeline facilities (including gathering lines) to include new and existing pipe rights-of-way and any equipment, facility, or building used in the transportation of gas (or hazardous liquids, which include petroleum and any other liquid designated by the Secretary of Transportation) or the treatment of gas or designated hazardous liquids during the course of transportation.

The definition of pipeline facilities was adopted from the Natural Gas Pipeline Safety Act of 1968 and the Hazardous Liquid Pipeline Safety Act of 1979. "Pipeline facility" may also include any such facility as defined and regulated under state laws comparable to these two federal statutes. This definition includes sumps, drp tanks,
skimmer pits, lubrication oil collection devices, and any other containers that are directly connected to regulated oil or gas pipelines or gas plants, which qualify as equipment used in the transportation of gas or hazardous liquid or the treatment of gas or hazardous liquids during the course of transportation.

Although many petroleum pipeline facilities are regulated under the Hazardous Liquid Pipeline Safety Act of 1979, and thus excluded fromSubtitle I jurisdiction, tanks associated with gathering lines in rural areas are statutorily exempt from Department of Transportation regulations. However, tanks associated with rural pipelines are exempted as “gathering lines” under the term “pipeline” as defined in 49 U.S.C. 20101. As a result, tanks associated with gathering lines in rural areas are statutorily exempt from Department of Transportation jurisdiction.

Today’s proposal defines a surface impoundment as a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials) that is designed to hold an accumulation of regulated substances and that is not an injection well. This definition was taken from Subtitle C regulations for hazardous waste management established under RCRA (40 CFR 260.10). Because the statute uses the somewhat specialized Subtitle C terms “surface impoundment, pit, pond, and lagoon” to define this exclusion, it is likely that Congress also intended to borrow the meaning of surface impoundment from Subtitle C. Examples of structures thus excluded from UST jurisdiction are holding, storage, settling, and aeration pits, ponds, and lagoons.

(6) Surface Impoundments, Pits, Ponds and Lagoons Exclusion. The fifth exclusion covers any “surface impoundment, pit, pond or lagoon.” Today’s proposal defines a surface impoundment as a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials) that is designed to hold an accumulation of regulated substances and that is not an injection well. This definition was taken from Subtitle C regulations for hazardous waste management established under RCRA (40 CFR 260.10). Because the statute uses the somewhat specialized Subtitle C terms “surface impoundment, pit, pond, and lagoon” to define this exclusion, it is likely that Congress also intended to borrow the meaning of surface impoundment from Subtitle C. Examples of structures thus excluded from UST jurisdiction are holding, storage, settling, and aeration pits, ponds, and lagoons.

(7) Storm Water or Wastewater Collection Systems Exclusion. The sixth exclusion covers a “storm water or wastewater collection system.” Today’s proposal defines a “storm water or wastewater collection system” as piping, pumps, conduits and any other equipment necessary to collect and transport the flow of surface water runoff resulting from precipitation, or domestic, commercial, and industrial wastewater to and from detention areas or any areas where treatment is designated to occur. The collection of stormwater or wastewater must be directed towards conveyance, and does not include storage or treatment of stormwater or wastewater except where incidental to conveyance.

Tanks that are associated with storm water and wastewater collection systems are exempted under this exclusion if the tanks are not designated for detention or treatment. Tanks where incidental treatment or detention occur are exempt. EPA has included the phrase “incidental treatment or detention” to alleviate potential confusion over whether some of the appurtenances associated with these collection systems could be considered tanks.

Several commenters stated that the phrase “incidental to conveyance” in the April guidance definition was unclear and confusing. The Agency has considered eliminating the phrase “incidental to conveyance” but decided to retain it since it is the intent to exempt from regulation those parts of the collection system where incidental treatment or detention occurs and which are also “incidental to conveyance.” The Agency has solicited public comment on this issue and specifically requests examples of all parts of the collection system that would be exempted. This list could be included in the final rule to provide clarification. To date, the Agency defines devices that are part of the collection system such as weirs, manholes, catch basins, ejector stations, wet wells, and dry wells as examples of structures where treatment or detention is incidental to conveyance. Included in this category are accommodations made in certain collection systems to temporarily detain peak flows until capacity is available for the treatment facility.

One commenter on the April guidance suggested that collection system be defined as the “complete path of the water flow from its first entry into a drain or trench until it is discharged.” EPA believes this definition is too broad and includes structures and equipment that are not typically included in an engineering definition of “collection system.”

Treatment incidental to conveyance means there is not retention time for the purpose of treatment and the tank/pipes subsequently empty into a collection system. Acid neutralization tanks and oil/water separators are considered forms of treatment not incidental to conveyance if the liquid is retained for treatment. Therefore, they are not excluded.

(8) Flow Through Process Tank Exclusion. The seventh exclusion covers any “flow-through process tank.” Today’s proposal defines a flow-through process tank as a tank that forms an integral part of an industrial or commercial process through which there is a steady or uninterrupted flow of materials during the operation of the process. The term “flow-through process tank” does not include tanks used to store regulated substances prior to their introduction into the industrial or commercial process, or to store regulated substances as intermediates, byproducts or finished products of the process.

Today’s proposed definition differs from the April guidance in that it no longer limits the exclusion to manufacturing process tanks but extends the exclusion to any tank that forms an integral part of an industrial or commercial process. The proposed definition reflects concerns from several commenters that a process designed to be steady will have some interruptions and pauses due to periodic maintenance or emergency shutdowns. Thus, our proposed definition of “flow-through” clarifies that flow must be “steady” only during the operation of the process. However, if a flow-through tank regularly stores regulated substances during periods of interruption, it is a storage and not a flow-through process tank.

In developing this definition, consideration was given to changing the term “uninterrupted” to “recurring.” Some commenters on the April guidance were concerned that the term “uninterrupted” was too restrictive because some processes will have starting and stopping points, such as a batch process; therefore, some of the tanks in the process would be excluded and others would be regulated. EPA rejected including the term “recurring” in today’s definition because it is unclear as to what the effect would be and it could be interpreted to eliminate jurisdiction over any UST systems with periodic input and outflow, including UST systems located at gasoline filling stations. The Agency solicits public comment on this issue.

Because EPA does not have sufficient information on the scope of the exemption if revised by the suggested wording changes, the Agency requests factual information, particularly process diagrams, indicating what tanks should be excluded as “flow-through” process tanks given the nature of the specific process and function of the tank. EPA may further refine this definition, based on public comment on specific processes, and is considering including a final definition examples of specific tanks which are “flow-through process tanks.”

An issue raised by this definition concerns the meaning of “integral part of the process.” EPA interprets this phase to mean that the process could not be operated without the flow-through process tank. Several commenters on the April guidance have asserted that some tanks store
intermediates that are integral to a process and should be included in the definition of a flow-through process tank. Such tanks, it has been argued, are a necessary aspect of a process in order for that process to be conducted safely and to allow for an adequate supply of raw materials to be used for batch operated processes. EPA believes that, because these tanks are intermediate storage tanks, they are not exempt. The Agency solicits further comments on this and on whether “integral part” would include governmental- and required wastewater treatment flow-through tanks that are a necessary part of an industrial or commercial operation.

(9) Liquid Traps or Gathering Lines Related to Oil or Gas Production and Gathering Operations. The eighth exclusion covers “liquid trap or associated gathering lines directly related to oil or gas production and gathering operations.” In today’s proposal the oil and gas production liquid trap exclusion refers to sumps, well cellars, and other traps used in association with oil and gas production, gathering, and extraction operations (including gas process plants), for the purpose of collecting oil, water, and other liquids. Such liquid traps may temporarily collect liquids for subsequent disposition or reinjection into a production or pipeline stream, or may collect and separate liquids from a gas stream. Although liquid traps are often used in activities other than oil and gas production, the only type of liquid trap excluded from UST jurisdiction under the statutory liquid trap exclusion used for the purpose of separating unused oil and gas liquids from water at oil and gas production facilities. Liquid traps used in conjunction with landfill methane gas production facilities are within this exclusion and would not be subject to UST jurisdiction. Liquid traps such as grease and oil traps at gas stations, however, are not within this exclusion.

Today’s proposal defines gathering lines as any pipeline, or associated equipment used in the transportation of oil or gas during oil or gas production or gathering operations.

(10) Underground Areas Exclusion. The ninth exclusion covers “storage tanks situated in an underground area (such as a basement, cellar, mine, working, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.” In today’s proposal, this exclusion applies to underground rooms where tanks are located on or above the floor surface. The purpose of this exclusion is to remove from UST jurisdiction tanks that are technically underground but that are, in a practical sense, no different from above ground tanks. They are situated so that, to the same extent as tanks above ground, physical inspection for leakage is possible. Thus, the requirements to be able to physically inspect the tank for leakage is consistent with the purpose of this exclusion.

Tanks located in a below grade structural vault, cellar, basement, mine or other underground room would be subject to the proposed UST exclusion if the tank sits on or above the surface of the floor and there is sufficient space to enable physical inspection of the tank, but not necessarily the tank bottom.

An issue presented by this definition is that such tanks would not be subject to corrosive forces because their components are not placed in direct contact with the surrounding soil. Therefore, they would be less likely to have a release. This would mean that the ability to “physically inspect the tank” may be irrelevant. The Agency has considered revising this definition to include only “underground tanks situated in a room that is part of a larger structure or building.” EPA requests comments on this issue.

EPA expects that many new storage tank systems will be placed in underground containment vaults or to aboveground locations as a result of today’s rules, once they are finalized. This could result in an increase in volatile emissions to the air because the product stored will be subject to higher temperature conditions that promote emissions through vent pipes. EPA solicits comments on the need in the future for control measures to reduce the impacts of such developments.

b. Definition of Terms Used in the Regulations

In addition to proposing terms that clarify the statutory definitions contained in Subtitle I, the Agency is proposing to add in 40 CFR Part 280 the following definitions of terms used in today’s proposal.

(1) Aboveground Release. Aboveground release means any release to the surface of the land or to surface water. This includes, but is not limited to, releases from the aboveground portion of an underground storage tank system and releases associated with overfills and transfer operations as the petroleum moves to or from an underground storage tank.

(2) Ancillary Equipment. Ancillary equipment means any device including, but not limited to, such devices as fittings, flanges, valves, and pumps, that are used to distribute, meter, or control the flow of petroleum or hazardous substances to and from an underground storage tank.

(3) Below Ground Release. Below ground release means any release to the subsurface of the land and to ground water. This includes, but is not limited to, releases from the below ground portions of an underground storage tank system and releases associated with overfills and transfer operations as the petroleum moves to or from an underground storage tank.

(4) Cathodic Protection. Cathodic protection is a technique to prevent corrosion of a metal surface by making that surface the cathode of an electrochemical cell. A tank can be cathodically protected through the application of either galvanic anodes or impressed current.

(5) Compatible. Two or more substances are compatible if they are able to maintain their respective physical and chemical properties upon contact with one another for extended periods of time and under various environmental conditions (e.g., temperature).

(6) Corrosion Expert. Corrosion expert means a person who, by reason of his/ her knowledge of the physical sciences and the principles of engineering and mathematics, acquired by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person must be certified as being qualified by the National Association of Corrosion Engineers (NACE) or be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control of buried or submerged metal piping systems and metal tanks.

(7) Electrical Equipment. Electrical equipment means underground equipment which contains dielectric fluid which is necessary for the operation of equipment such as transformers and buried electrical cable.

(8) Excavation Area. Excavation area is defined as the volume containing the tank system and backfill material as bounded by the ground surface and walls and floor of the pit and trenches into which the tank system is placed at the time of installation.

(9) Existing Tank System. “Existing tank system” means a tank system used to contain an accumulation of regulated substance or for which installation has commenced on or prior to the effective date of this regulation. Installation will be considered to have commenced if the owner or operator has obtained all federal, state, and local approvals, or
permits necessary to begin physical construction of the site or installation of the tank system, and if either (1) a continuous onsite physical construction or installation program has begun, or (2) the owner or operator has entered into contractual obligations—which cannot be cancelled or modified without substantial loss—for physical construction at the site or installation of the tank system to be completed within a reasonable time.

(10) Free Product. Free product refers to regulated substance in the non-aqueous phase (e.g., liquid not dissolved in water) that is beneath the surface of the ground.

(11) Hazardous Substance Tank System. Hazardous substance tank system means an underground storage tank system that contains an accumulation of hazardous substance or a mixture of petroleum and hazardous substances in which hazardous substances comprise greater than 50 percent of the weight or volume of the mixture.

(12) Hydraulic Lift Tanks. Hydraulic lift tank means a tank holding hydraulic fluid for a closed-loop mechanical system that uses compressed air and hydraulic fluid to operate lifts, elevators, and other similar devices.

(13) Implementing Agency. Implementing agency means EPA, or in the case of a state with a program approved under Section 9004, the designated state or local agency responsible for carrying out an approved underground storage tank program.

(14) Interstitial Monitoring. Interstitial monitoring is a leak detection method which entails surveillance of the space between an underground tank system and the primary containment system for a change in steady state conditions. In a double-walled tank, this change may be indicated by a loss of vacuum, a drop in pressure, a drop in the fluid level in a visible reservoir, or the detection of the regulated substance in the interstitial space. In a secondary containment system consisting of a liner (natural or synthetic), bentonite-sealed soils, or a vault, the surveillance consists of frequent to continuous sampling from a monitoring well between the UST and the liner to detect the presence of substance in the well(s).

(15) Inventory Controls. Inventory controls are techniques used to identify a release of regulated substances that are based on tank liquid level measurements and reconciliation of those measurements with product delivery and withdrawal records.

(16) Liquid Trap. "Liquid trap" means sumps, well cellars, and other traps used in association with oil and gas production, gathering, and extraction operations (including gas production plants), for the purpose of collecting oil, water, and other liquids. Such liquid traps may temporarily collect liquids for subsequent disposition or reinjection into a production or pipeline stream, or may collect and separate liquids from a gas stream.

(17) New Tank System. "New Tank System" means a tank system that will be used to contain an accumulation of regulated substance and for which installation has commenced after the effective date of this regulation. Installation will be considered to have commenced if the owner or operator has obtained all federal, state and local approvals, or permits necessary to begin physical construction of the site or installation of the tank, and if either (1) a continuous onsite physical construction or installation program has begun, or (2) the owner or operator has entered into contractual obligations—which cannot be cancelled or modified without substantial loss—for physical construction at the site or installation of the tank system to be completed within a reasonable time.

(18) Operational Life. Operational life refers to the period beginning when installation of the tank system has commenced until the time the tank system is properly closed under Section 280.80.

(19) Overfill Release: An overfill release refers to a release that occurs when a tank is filled beyond its capacity, resulting in a discharge of the regulated substance to the environment.

(20) Petroleum Tank System. Petroleum tank system means an underground storage tank system that contains an accumulation of petroleum or a mixture of petroleum and hazardous substances in which petroleum comprises greater than 50% of the weight or volume of the mixture.

(21) Positive Sampling, Test, or Monitoring Results. Positive sampling, test, or monitoring results refer to the results of sampling, testing, or monitoring using a method described in Subpart D that indicate that a release from an UST system has occurred.

(22) Release Detection. Release detection means determining whether a release of a regulated substance has occurred from the UST system into the environment or into the interstitial area between the UST system and a secondary barrier around it.

(23) Secondary Containment. Secondary containment refers to a system installed around an UST that is designed to prevent a release from migrating beyond the secondary containment system outer wall (in the case of a double-walled tank system) or excavation area (in the case of a liner or vault system) before the release can be detected. Such a system may include: but is not limited to, impervious liners (both natural and synthetic), double walls, vaults, or impervious soil treatments such as bentonite-sealed soils.

(24) Sump. Sump means any pit or reservoir that meets the definition of tank, including troughs or trenches connected to it, that serves to temporarily collect regulated substances.

(25) Tightness Testing. Tightness testing means a procedure for testing the ability of a tank system to prevent inadvertent release of any stored substance into the environment (or, in the case of an UST system, intrusion of ground water into a tank system).


(27) Unsaturated Zone. The unsaturated zone refers to the subsurface zone containing water under pressure less than that of the atmosphere, including water held by capillary forces within the soil and containing air or gases generally under atmospheric pressure. This zone is limited above by the ground surface and below by the upper surface of the zone of saturation (i.e., the water table).

(28) "UST System" or "Tank System". "UST System" or "Tank System" means an underground storage tank, connected underground piping, other ancillary equipment, and containment system, if any.

(29) Wastewater Treatment Tank. Wastewater treatment tank means a tank that is part of a wastewater treatment facility regulated under either Section 402 or 307(b) of the Clean Water Act, and which receives and treats or stores an influent wastewater which contains regulated substances.

B. Design, Installation, and Notification Requirements

The following sections describe general requirements applicable to all new UST systems storing petroleum or hazardous substances. These requirements also apply to existing UST systems which must be upgraded to meet new UST standards according to the schedule described in Section 2 below.
1. Performance Standards for New UST Systems

a. Design and Construction (Section 280.20 (a) and (b))

Overview. Proper tank system design and construction must not only ensure structural integrity of the tank system at the time of installation, but also throughout the period of its intended use. Proper design and construction encompasses not only the design and fabrication of the tanks and piping themselves, but also ancillary design features, systems, or equipment that enhance or protect the structural integrity of the tank system.

There is concern that, in the absence of adherence to proper standards, tank systems might be inadequately designed or built with inferior materials, thereby resulting in structural failures. Lack of adherence to fabrication standards might also lead to failures from burst seams and couplings, cracked walls, or poor welds. There are very few reported incidents of releases resulting from design or construction failures, and the Agency attributes this low failure rate to widespread voluntary adherence to existing codes and practices. Today’s proposal will ensure that these voluntary practices are followed nationwide.

Corrosion is the major cause of releases from the existing UST population. Steel tank systems unprotected from corrosion presently are in widespread use and corrode easily in many soil conditions. EPA’s Local Retrospective Incidents Study reported that corrosion of bare steel tank systems was by far the major cause of releases from existing UST systems, roughly 60 percent. Corrosion cells are created across different areas of the tank system, especially vertically as soil moisture and other characteristics vary with depth, and between dissimilar metals. Similar metals that have been in the ground for different periods of time also can establish a corrosion cell. Because of these recognized problems, corrosion protection must be addressed as part of the design and construction of the tank system.

Today’s proposal (Section 280.20) requires that new UST systems be designed and constructed in a manner that will prevent releases due to structural failure and corrosion for as long as they are used to store regulated substances. Improper installation is the other major cause of releases from both unprotected and protected tank systems (including FRP) and is intimately connected to ensuring that the structural design of the tank system maintains its integrity. The Agency’s proposed approach toward proper installation is addressed in the next section of the preamble (Section VLB.1.b.).

Current Practices. Today’s proposal is the result of a careful evaluation of the current design and construction requirements embodied in the Interim Prohibition. The Agency specifically questioned whether to make the requirement more stringent. The sections that follow describe various existing practices and regulatory programs aimed at ensuring structural integrity of tank systems through proper design and construction.

(1) National Consensus Codes of Practice. Several professional and scientific organizations have established standards and codes that relate to design and construction of underground tank systems, piping, and ancillary equipment. These include the National Fire Protection Association (NFPA), the Steel Tank Institute (STI), Underwriters Laboratories (UL), National Standards Institute (NSI), the National Association of Corrosion Engineers (NACE), the American Society of Testing and Materials (ASTM), the Western Fire Chiefs Association (WFCA), the Occupational Safety and Health Association (OSHA), the Petroleum Equipment Institute (PEI), the American Petroleum Institute (API). Some additional codes developed by similar organizations in Canada have been adopted by some of the northern states, including standards published by Underwriters Laboratories of Canada (ULC). Collectively, these organizations have published more than twenty guides, codes and standards relating to the design and construction of tanks, pipes and UST-related systems. Generally, these publications are written by committees of knowledgeable and experienced professionals and are subjected to independent peer review. These guides, codes, and standards are widely recognized as unbiased and independent. Because they represent consensus positions, these publications have become standards which are closely followed in many segments of the industry. Frequently, these codes are adopted by state and local governments in their UST regulations and ordinances.

Some of the most important existing codes follow:

• ASTM D4021-66 provides detailed specifications for fabricating and testing FRP tanks;
• UL 58 describes in detail the standards for fabrication and assembly of steel tanks and the required tests for leakage;
• UL 1316 provides requirements for the construction, performance, manufacture, testing, and installation of FRP tanks;
• “Specification for sti-P3 systems of External Corrosion Protection of Underground Steel Storage Tanks,” 1987 addresses the design and fabrication of coated and cathodically protected steel underground storage tanks;
• ULC-S603-M1981 addresses assembly of tank systems comprehensively, design standards, and testing guidelines for horizontal cylindrical steel tanks.
• ULC-S603-M1982 provides guidance on construction requirements, external corrosion protection, installation and maintenance;
• ASTM—“Steel Piping, Tubing and Fittings” details more than 130 standards on the design and fabrication of steel pipe;
• NFPA 30 addresses tank systems comprehensively from a fire explosion perspective. It references the above codes and sets performance standards.

(2) State and Local Regulations. An EPA review of state UST programs identified 14 states that already have UST regulations. Many more regulate UST systems through existing fire codes. Some have promulgated design specifications covering materials, welding, fabrication, and assembly; however, these states are in the minority. Most states adhere to programs that are based on one or more consensus codes. They have accepted strict adherence to these codes as an assurance of the tank system’s integrity for its operational life. For example, the Florida UST program requires design, construction, and installation to be in accordance with NFPA 30, Chapters 2-1 and 2-3; API 1015, Chapters 3(3) and 3(4); and UL 58 or UL 1316.

(3) Underground Tanks Storing Hazardous Waste. The Hazardous Waste Tank Regulations promulgated on July 14, 1986, established the following performance standard: owners and operators of new tank systems or components must ensure that the foundation, structural support, seams, connections, and pressure controls (if applicable) are adequately designed and that the tank system has sufficient structural strength, compatibility with the waste(s) to be stored or treated, and corrosion protection so that it will not collapse, rupture, or fail. The owner and operator must obtain a written assessment—reviewed and certified by an independent, qualified, registered professional engineer—attesting that the system has sufficient structural integrity and is acceptable for the storing and treating of hazardous waste. In addition, a corrosion expert must determine the
factors affecting the design and operation of a cathodic protection system. All these components are submitted by the owner and operator in a permit application to EPA or the authorized state.

(4) Interim Prohibition. Subtitle I, Section 9003 (g) of RCRA prohibits installation of an underground storage tank system for the purpose of storing regulated substances unless the tank: (1) will prevent that damage due to corrosion or structural failure for the operational life of the tank system, (2) is corrosion protected in one of several ways, and (3) is compatible with the substance stored. The prohibition allows for variance from corrosion protection if soil resistivity is greater than 12,000 ohm-centimeters.

Today's Proposal. (1) Design and Construction Requirements. EPA has reviewed data on tank system failures to determine if the design and construction requirements of the Interim Prohibition are adequate. We have concluded that more stringent design and construction requirements are needed, especially with regard to corrosion protection.

Two general approaches to design and construction standards were considered by EPA: detailed design standards or general performance standards. Detailed design standards would specify the proper design and construction of tank systems. Such design standards could be included in the regulation explicitly or the standard could reference existing codes and standards. EPA has reservations about this approach for several reasons.

First, the design and construction of tank systems will change over time and continued advances in tank system material and fabrication technologies are expected. If EPA promulgated detailed design standards, it would have to continually revise and update them to reflect changes in technology. Second, to keep up with these changes, EPA would have to closely monitor changes in tank design and construction technology to enable updating the design standards. EPA does not believe that it needs to duplicate the existing infrastructure of industry consensus codemaking. Third, detailed design standards that were under continued development would result in conflicts with the many state UST programs, as well as complicate the approval process for state programs.

The use of design standards might be justified if there were no industry consensus with respect to tank design. While a specific design standard provides clear guidance to the regulated community on the design and construction of tank systems, EPA has determined that the standards developed by industry consensus are already providing adequate protection of human health and the environment.

The general performance standard approach that EPA is proposing today for tank and piping design and construction in Section 280.20 (a) and (b) is intended to build upon the Interim Prohibition by requiring that the tank and piping be designed and constructed in accordance with consensus codes and accepted practices. The industry consensus codes are, in fact, being followed for many of the new installations now.

Today's proposed rule requires that each tank be properly designed, constructed and protected from corrosion in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory. Nationally recognized is defined to mean a group or organization that is composed of a national membership that is representative of its members' views concerning tank design and construction or corrosion protection.

Generally, to have achieved nationally recognized status the association will have been in existence for a reasonable period of time, and will have been active in promulgating standards that are in widespread use, and will have been active in research and in the scientific and regulatory debate of issues relating to its areas of interest. The Steel Tank Institute is an example of a nationally recognized association because it has been cooperating with other industries, organizations and government bodies in the development of reliable tank standards since 1916.

Table 2 of this preamble lists a number of codes that have been tested through widespread and lengthy use. In this manner, the codes have become established as surrogate regulations. The Agency considers all the organizations listed in this table as meeting the definition of nationally recognized associations or independent testing laboratories. The Agency invites comment on the methods that should be used to recognize additional codes that meet the intent of the requirement of today's proposed rule that each tank be properly designed, constructed and protected from corrosion in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory.

A number of these codes and standards are listed in today's proposal as guidance in meeting this general performance standard. These codes are referenced in notes of the use of these particular codes is not part of today's proposed requirements. The owners and operators may rely on any other applicable codes and standards. The codes are referenced only to provide examples of codes that meet this general performance standard.

(2) Tank Requirements (Section 280.20(a). Today's proposal is more stringent than the requirement for corrosion protection in the Interim Prohibition because it requires all new steel tanks to be protected from corrosion by either using both corrosion-resistant coatings and cathodic protection or by being made of composite construction. The Interim Prohibition allows either coatings or cathodic protection.

Today's proposal allows three tank fabrication techniques: fiberglass-reinforced plastic; coated and cathodically protected steel; and steel and fiberglass-reinforced plastic composite. The Agency believes that these three types of tanks will perform adequately if they are designed and constructed in accordance with nationally recognized association or independent testing laboratory codes of practice. In addition, other tank design, construction or corrosion protection techniques are allowed in today's proposal if the implementing agency determines the technique is no less protective of human health and the environment. The Agency has included this provision to allow the development and use of new technologies and to allow design variations for specific site conditions.

These codes of practice are recommended for guidance in the design and construction of fiberglass-reinforced plastic (FRP) tanks in proposed Section 280.20(a)(1). Other codes may also be applicable, but the Agency believes that tanks built in accordance with the American Society of Testing and Materials, Underwriters Laboratories, or Underwriters Laboratories of Canada standards will minimize releases during their intended period of use.

The second type of tank (proposed in Section 280.20(a)(2)(i)) is the coated and cathodically protected steel tank. This type of tank is in wide use and is reported to have very high reliability.

Coatings isolate the external surfaces of the tank system from the environment and reduce the electric current demand on the cathodic protection system required to obtain the desired protection levels throughout the life expectancy of the tank system. EPA has received suggestions that the typically used coatings will inevitably be damaged and "holidays" or separations of the coating from the tank, will occur. Without a
cathodic protection system, all of the galvanic forces will be focused on the holiday, causing rapid corrosion and subsequent failure. Indeed, many believe that a coating could be made sufficiently impermeable and durable to prevent the formation of holidays. This type of coating is referred to as a cladding and is discussed in the composite tanks section.) It is also argued that the cathodic protection system on a bare steel tank will be overworked. Particular concern has been raised about the premature consumption of sacrificial anodes. If not checked frequently enough, the tank may quickly become unprotected. Other analyses have suggested a drawback of the combined coated and cathodically protected system. Some data suggest that the cathodic protection system can cause delamination, a large scale separation of the coating from the tank, exposing the tank to the environment. This could lead to serious corrosion problems.

The Agency has reviewed these arguments and is persuaded that coatings will enhance the operation of the cathodic protection system by reducing its electric current demand, and, conversely, the cathodic protection system will protect the coated UST from corrosion-caused releases at holidays. Consequently, today’s proposal requires both systems for new UST systems. In addition, the cathodic protection must be inspected and maintained in accordance with the Operation and Maintenance requirements of Section 280.31. The Agency requests comments on the merits of this approach.

There are a number of industry consensus codes that provided detailed performance requirements for coated and cathodically protected steel tanks. The Steel Tank Institute’s “Specification for sl allied to the Protection of Underwater Steel Storage Tanks” is by far the most widely used design standard for coated and cathodically protected tanks. The specification covers joint design, coating selection, and sacrificial anode design and construction. Another code under development is the UL Standard 1746, “Corrosion Protection System for Underground Storage Tanks.” The UL code will provide considerable flexibility in the design of the tank. However, the design must meet strict performance requirements related to the structural integrity of the tank coating and sacrificial anodes. This code is just now being issued for comment, but some of the current tank designs (for example, the STIPS specifications) are expected to pass the UL 1746 performance requirements. The comment period and time required to obtain UL certification adds a degree of uncertainty to the use of this code for cathodically protected tanks. This issue is discussed further in the following section on composite tanks.

Underwriters Laboratories of Canada also publishes consensus codes for the design and construction of coated and cathodically protected steel tanks. These codes are reported to be in use in areas bordering Canada and include CAN4-609-M85, “Standard for Steel Underground Tanks for Flammable and Combustible Liquids” CAN4-403.1-M85, “Galvamic Corrosion Protection Systems for Steel Underground Tanks for Flammable and Combustible Liquids’” and CAN4-S631-M84, “Isolating Bushings for Steel Underground Tanks Protected with Coatings and Galvamic Systems.” The Agency believes that tanks designed and constructed in accordance with these three codes, will perform adequately throughout their period of intended use and will not fail due to corrosion.

The Agency believes that pre-engineered, factory-installed coatings combined with sacrificial anodes for cathodic protection provides very reliable and long lasting cathodic protection for most situations. However, some tank configurations and site conditions may require the use of field-installed cathodic protection. Because the selection of field-installed cathodic protection is complex, today’s proposal requires in Section 280.20(a)(2)(ii) that field-installed cathodic protection systems for tanks be designed by an independent corrosion expert. Among the variables which can affect corrosion are electrolyte activity, acidity, moisture levels, soil resistivity, temperature, bacterial action, and the presence of oxidizing agents. Because of the complexity of these influences, either operating singly or together, UST system owners and operators do not have the necessary expertise to select the most effective materials of construction and corrosion protection systems. Proper attention to these problem areas can practically eliminate the likelihood of releases caused by corrosion. EPA has concluded that an independent corrosion code for coated steel does not assess the corrosion protection measures that are most suited for the site-specific cathodic protection system. The Agency requests comments on the merits of this approach.

The third type of tank allowed in today’s proposal (in § 280.20(a)(3)) is the composite tank. In this type of tank, a noncorroding cladding covers a steel tank and prevents corrosion of the steel. It is essential that the cladding completely isolate the steel structure from the environment because, as described above, accelerated corrosion can occur at holidays or voids in the cladding. Therefore, the cladding must withstand rough handling during installation and must remain intact throughout the life of the tank. The composite tanks that are currently marketed are clad with FRP. However, it has been reported to the Agency that other cladding materials are currently being tested.

The Agency has reviewed the performance requirements and manufacturing techniques for composite tanks and has concluded that it is feasible to construct tanks with claddings that are sufficiently continuous, impermeable and durable to protect the steel structure of the tank from corrosion. Underwriters Laboratories is developing detailed performance standard for the design and construction of composite tanks and today’s proposal recommends UL Standard Number 1746, “Corrosion Protection for Underground Storage Tanks,” for guidance in meeting the requirements. The UL standard includes many of the performance requirements from both FRP and coated steel tank standards.

These tank types are presently allowed under the Internation Prohibition and according to the manufacturers, some of these tanks have been in use for as long as 20 years without a documented case of failure. However, because of a lack of any test data on the field performance of a large number of these types of tanks, the Agency is still concerned about the long-term impermeability of the cladding. Should the cladding lose some of its characteristics of impermeability, holidays could develop. Some manufacturers argue that corrosion would passivate in small holidays and cause the corrosion to cease. However, according to information available to the Agency, one user of composite tanks has retrofit its composite tanks with cathodic protection. The tank manufacturer contends that this retrofit was precautionary and that there was no overt sign of corrosion because.

Although UL is still developing UL 1746, three major composite tank manufacturers have received approval from UL to manufacture composite tanks. The UL 1746 standard is required to be ready for public comment. This process will require a 60- to 90-day comment period and a short period after the comment period closes before final
publication. After final publication, a test period of about 6 months plus an additional month will be required before the tank manufacturers are certified. This adds a degree of uncertainty to the final UL approval of the use of these tanks.

Because of these uncertainties and because of the potential for corrosion at breaches in the cladding, the required level of performance must be greater for composite tanks than for coated tanks. The cladding on composite tanks must be more resistant to damage than coating on coated steel tanks. It must be highly impermeable to moisture to prevent corrosion-induced delamination of the cladding. In addition, the cladding must provide a greater degree of electrical isolation than a coating to provide certainty that the cladding alone will protect the steel from corrosion. The Agency invites comments and documented performance data regarding these issues. If no acceptable data exist regarding these concerns, then the Agency may require periodic tests conducted over the operating life of these tanks to identify any holidays. This subject is discussed further in the operation and maintenance section.

The Agency expects that other tank design, fabrication and corrosion protection techniques will be developed. In addition, certain environmental settings may have a very low potential for corrosion. Therefore, today's proposal includes a provision in Section 280.20(a)(4) for using alternative design and corrosion protection methods if the implementing agency determines that the method is no less protective of human health and the environment. The owner and operator may use alternative designs and construction methods if the implementing agency finds, as a result of a demonstration or other means, that the alternative design or method is no less protective of human health and the environment. In deciding on whether an affirmative finding shall be issued, the implementing agency may consider:

- The nature and quality of the product;
- The proposed alternate design and operation; and
- All other factors that would influence the quality and mobility of the constituents and the potential for them to migrate to ground water or surface water.

If an affirmative finding is issued, the implementing agency will require the owner and operator to construct and operate the system in a manner consistent with the demonstration. This approval process has been included to encourage innovation. In the process of preparing this proposed rule, the Agency has seen reference to several potential alternative systems such as coated tanks, jacketed tanks, lined steel tanks and lined concrete tanks. In addition, some sites may not require the degree of corrosion protection required under today's proposal. If such systems are as protective of human health and the environment, the Agency desires to provide a mechanism for allowing approval of such alternatives. This provision will apply to both new and upgraded tank systems.

EPA intends that the implementing agencies have the responsibility of developing the approval process for alternative design and construction techniques. However, the Agency expects that requests for approval of alternative designs will be made by owners, operators, installers, and manufacturers. For example, an owner and operator may request an exemption from the corrosion protection requirements based on the low corrosion potential of the site. In another case, a tank manufacturer may request approval for the use of an alternative tank design at any site based on the corrosion resistance of the tank. The Agency anticipates that, in both cases, the implementing agency would review performance data prepared by a corrosion expert and product demonstration information submitted by the party requesting approval. In addition, EPA recognizes that the implementing agency could also review date and opinions from independent experts in the field of concern.

Today's proposal drops the 12,000 ohm-cm exclusion of the Interim Prohibition. This exemption has been criticized as an inadequate measure of the propensity to corrode. Soil resistivity values are average resistivities of the soil between the surface of the ground and the depth being measured, and variability is common. Large variations result in soil composition changes which are responsible for the promotion of corrosion activity. A concentrated corrosive attack can occur even in areas of generally high resistance and low variability. It is reportedly not uncommon to find premature pipe leaks and tank failures in soil of more than 30,000 ohm-cm due to soil resistivity variations.

Soil corrosivity is actually a function of many variables in addition to resistivity, including soil conductivity, pH, moisture content, chloride and sulfide ion concentration. The use of the single resistivity variable is inadequate to measure the propensity to corrode and proposes today to drop the 12,000 ohm-cm exclusion. Further, because of the complexities involved in attempting to accurately measure the propensity to corrode, the Agency is not proposing any alternative exclusions. This increases the stringency of the rule by requiring all tank systems to have corrosion protection systems.

(3) Piping Requirements (Section 280.20(b)). The design and construction of underground piping is addressed in today's proposal. Although the requirements for piping are similar to those for tanks, the Agency feels that design and construction requirements for piping should be addressed specifically in the regulation to identify them clearly.

There are numerous industry consensus codes that are specific to the design and construction of UST piping systems. These include codes written by the Underwriters Laboratories, Underwriters Laboratories of Canada, National Fire Protection Association, and American Petroleum Institute. In addition, American Society for Testing and Materials has published more than 130 standards on the design and fabrication of steel pipe. The Agency believes that they provide adequate guidance for ensuring compliance with the requirement.

The standards that are recommended for guidance in the design and construction of FRP pipe (in §280.20(b)(1)) include standards for flexible connectors. The ends of each line as well as changes in direction should be fitted with flexible connectors or swing joints to allow movement of the tank and pipe system. These flexible connectors can be used with steel or FRP piping, but swing joints built of threaded connectors cannot be used for FRP pipes. Swing joints are also discussed in the following section on installation requirements.

Steel piping is required to be coated and cathodically protected in §280.20(b)(2). The cathodic protection system must be designed by an independent corrosion expert because the Agency believes that the layout of piping systems has a major impact on the type and degree of cathodic protection needed. There are many possible piping layouts, depending on the site plan, making it a project in itself. Therefore, the requirements for cathodic protection of steel piping are the same as those for field-installed cathodic protection for tanks.

Only FRP and cathodically protected steel pipe are identified specifically in the regulation. The Agency does not
know enough about other types of pipes to allow them specifically. However, as in the tank corrosion protection section, there is an allowance for alternative methods. The Agency expects that other design, construction and corrosion protection techniques may be developed in the future or already in use (e.g., cooper tubing). In addition, certain environmental settings may have a very low potential for corrosion. Therefore, today's proposal in Section 280.20(b)(3) includes a provision allowing for using alternative design and construction methods if the implementing agency determines that the method will prevent releases in a manner that is no less protective of human health and the environment than the two other methods described.

Other Issues Requiring Public Comment. The Agency has identified three other aspects of design and construction that could have an impact on the structural integrity of UST systems. The advantages and disadvantages of these other aspects are not clearly established, and the Agency therefore is seeking public comment and information on whether there is a need to address them in regulation. The following is a brief discussion of those issues.

(1) Manways. All pipes and gauge hatches in an underground tank can be installed through a manway in the top of the tank. The principal use of a manway is to gain access to the interior of a tank for inspection and repair. In addition, all of the connections can be made to the manhead that covers the manway, protecting the integrity of the tank which is only violated in the installation of the manway itself. The mandated use of manways as the sole entry point for all pipes and gauge hatches in all UST systems is apparently a widespread practice in Europe. However, the common U.S. practice is to have several openings on the top of the tank for piping and gauge hatches. When all of the connections are made to the manhead that covers the manway, protecting the integrity of the tank which is only violated in the installation of the manway itself. The mandated use of manways as the sole entry point for all pipes and gauge hatches in all UST systems is apparently a widespread practice in Europe. However, the common U.S. practice is to have several openings on the top of the tank for piping and gauge hatches. When all of the connections are made to the manhead that covers the manway, protecting the integrity of the tank which is only violated in the installation of the manway itself.

connected without having to cut the pipes. These types of couplings offer an added place for releases to occur and thereby reduce the reliability of the tank system as a whole. However, even though these devices can fail, the coupling failures in a manway are easier to repair than failures in pipes that are connected in multiple places directly to inaccessible places on top of the shell of the tank. Manway couplings are accessible without excavation and are designed for easy replacement of the seals or the whole coupling.

The Agency recognizes there may be significant additional benefits from using manways. Comment and information is requested about the relative risks of the manway and traditional systems and, if EPA requires manways in the final rule, whether it will lead to a significant reduction in the number or volume of releases.

(2) Pumps. Two basic methods exist for removing the liquid stored in underground storage tanks: pressure methods and vacuum methods.

Pressure methods pressurize the entire tank or lines with either the liquid itself, or a gas, such as air or nitrogen. This method is inexpensive but has some disadvantages: it can be unreliable and it can pose environmental problems if leaks occur. If a leak occurs in a pressurized system, when activated, it will pump the stored substance into the environment.

Vacuum methods draw the liquid out of the storage tank by subjecting the pipe to a suction. In this system, a pump is installed above grade level and the suction line is extended down into the tank near its bottom. The advantage of this system is that the line from the tank to the surface uses less than atmospheric pressure so that if there is a leak in the pipe, only air will enter the pipe—no liquid would escape into the environment. From an environmental standpoint this is the most desirable system. Several European programs have mandated suction pumps as intrinsically protective of the environment.

Pumping problems may arise with the suction method if leaks develop in the suction line. The operation of the pump can be quite erratic and if the tank systems run unattended for an extended period of time the pump can be severely damaged before the condition is discovered. Such behavior is indicative of a leak and alerts the tank owner that repair is necessary.

The Agency seeks comments on the advantages and disadvantages of suction versus pressurized piping systems; their prevalence in use today; and whether pressure pumps present such a risk to human health and the environment that they should be subject to more stringent controls (e.g., line leak detectors or secondary containment) or even prohibited from new tank systems; and whether suction pumps present less of a risk and should be subject to less stringent controls (e.g., reduced leak detection requirements). The Agency is specifically interested in receiving information concerning experiences with the sizes and impacts of releases from these two different types of systems. (See Section VI.D.5. for further discussion of line leak detection methods and solicitation of comments and information on this subject.)

(3) Internal Corrosion Protection. Until the last few years, little attention has been paid to internal protection of underground storage tanks; however, internal corrosion results from the reaction of water and oxygen in the stored product with the inside of the steel structure. External corrosion has been the major type of corrosion-induced failure in unprotected steel tanks. However, as the incidence of external corrosion is reduced by coating and cathodically protecting steel tank exteriors, internal corrosion could become a major source of failure. The Steel Tank Institute has identified two areas that are susceptible to internal corrosion and has developed recommended practices that protect them. The first area subject to internal corrosion is under the fill openings where filling the tank and taking dip stick readings can lead to accelerated corrosion. STI recommends that this area can be protected by welding wear plates to the bottom of the tank. Another area subject to internal corrosion is the unwelded plate overlaps. Water can become trapped in these crevices resulting in accelerated localized corrosion. These overlaps can often be eliminated by design changes, or they can be seal welded. A third solution to corrosion in plate overlaps is to cathodically protect the seam with sacrificial anodes. Another method to protect against internal protection, not included in the Steel Tank Institute's recommended practice, is to coat or line the tank interior with a noncorrosible material. Various countries in Europe mandate some of these practices to prevent internal corrosion.

EPA requests comments on industry experience with internal corrosion protection in terms of design, installation, efficacy and problems found. Information on the need for internal corrosion protection is also requested, including whether it should
be required for all new steel tank systems.

b. Installation (Section 280.20(c))

Overview. Proper installation is crucial to ensure the structural integrity of a new tank system. Installation includes excavation, tank system siting, burial depth, tank system assembly, backfilling of the tank system, and surface grading.

The data reviewed by EPA indicates that improper installation is a significant cause of steel and FRP UST system failures, particularly piping failures. Installation problems result from careless installation practices that do not follow recognized codes and procedures. For example, mishandling of the tank during installation can cause structural failure of FRP tanks or damage to steel tank coatings and cathodic protection. Improper anchoring, backfilling, inadequate cover, and insufficient tightening of loose fittings can also lead to system failures (including the piping).

EPA believes that if owners and operators would follow correct procedures for all tank system installations, then the number of releases would be significantly reduced.

Current Practices. Several professional and scientific organizations have established standards for the installation of underground tank systems. These organizations include the National Fire Protection Association (NFPA), the Steel Tank Institute, Underwriters Laboratories, the National Association of Corrosion Engineers (NACE), the Western Fire Chiefs Association, the Occupational Safety and Health Association, the Petroleum Equipment Institute (PEI), and the American Petroleum Institute (API).

Collectively, these organizations have published more than ten guides, codes, and standards for installing UST systems. As discussed above, generally these publications are written by committees of knowledgeable professionals and subjected to independent peer review.

Some of the most important codes follow:

- PEI/RP100-86 provides the most recently developed and comprehensive of the recommended practices for installation of underground storage tank systems.
- NFPA 30 addresses tank systems comprehensively from a fire explosion perspective. It references other codes and sets performance standards.
- API 1615 covers the factors that can contribute to successful installation of petroleum UST systems.
- NACE/RP-01-69 and RP-02-85 contain chapters on the installation of cathodic protection systems for metallic storage and piping systems.
- In addition, several tank manufacturers also provide their own installation instructions. At least one manufacturer of FRP tanks seals the instructions onto the tank.

State practices display considerable variation. At least 23 states have established requirements for proper installation. Most of the state regulations reference NFPA 30 as a general installation standard. However, other consensus guides, codes, and standards related to installation are also included by reference in some state regulations. For example, eleven states require that tank systems be installed according to manufacturer’s instructions, ten states require certification of the installation, and five states require installer certification.

EPA has previously addressed installation requirements for UST systems in two ways. First, under the Hazardous Waste Tank Rules, underground tank installers must follow proper installation procedures (in effect by requiring adherence to industry consensus codes) and the installation must be inspected by a registered professional engineer or qualified installation inspector before covering, enclosing, or placing a tank system into operation.

Second, although the Interim Prohibition of Subtitle I does not explicitly require the proper installation of new underground tank systems, the existing EPA guidance ("The Interim Prohibition: Guidance for Design and Installation of Underground Storage Tanks") recommends following the industry consensus codes and provides installation guidance in accordance with those codes.

Approaches to Regulation. The Agency considered six different methods or approaches that the owners and operators could use to ensure themselves that the installations are properly completed. These alternative approaches are:

- Certification or approval of installers by tank system manufacturers;
- Certification of installers by state or local regulatory agencies;
- Inspection of the installations by registered professional engineers;
- Inspection of the installation by state or local agencies;
- Completion of a manufacturer supplied check list of installation procedures; and
- Testing of the tank and piping for leaks during and after installation.

EPA does not have information indicating that one of the above approaches is better than the others. EPA is seeking comment on the advisability of these approaches. The Agency would especially like comments on the relative merits of certifying the installation versus certifying the installer. A desirable attribute that should be considered with any approach is its flexibility in tailoring an installation to site-specific considerations.

EPA believes that regulation of installation practices is primarily an institutional problem. A key element to successful implementation of installation requirements will be a program for education and outreach. EPA intends to pursue this program and seeks comment on how to proceed with an education and outreach program for owners, operators and installers regarding proper installation procedures.

Today’s proposal builds on the Interim Prohibition Guidance, but is more explicit. Because of the importance of proper installation and its complexity, the Agency has proposed a set of nine performance criteria that must be met in order to satisfy § 280.20(c)- These performance criteria are based upon recognized industry practice. They represent the major installation steps outlined in the Petroleum Equipment Institute Report RP100-66, and the American Petroleum Institute Publication 1615.

The first of the proposed performance criteria is that precautions must be used to prevent damage to the tank and pipe coatings or structures during installation. Also, any damage to the tank and piping should be repaired in accordance with the manufacturer’s instructions. The Agency included this criteria because it believes that many tank and piping failures result from mishandling of the tanks before and during placement. The tank and pipe manufacturers generally provide instructions on proper storage and handling. In addition, the tank and piping should be tested for structural failure at each major installation step (i.e., upon receipt of the tank, once the tank is placed in the ground, and after piping has been connected) prior to backfilling; tanks and piping should be pressurized with air and visually inspected for leaks using a soap solution. The test should be performed to provide assurance that the tank and piping are structurally sound before proceeding with the next installation step. The manufacturer’s instructions must be followed when repairing tanks and piping to ensure that
the repaired tanks or piping will perform adequately. Generally, repair instructions are adhered to as a standard industry practice with each tank and piping system. However, if additional instructions are needed, the manufacturer must be contacted.

The second performance criterion is that the excavation must be large enough to properly backfill the tank, piping, and associated equipment. EPA believes that backfill is a major component of the structural integrity of the tank and piping system and that enough space must be provided in the excavation to adequately place and compact backfill. Sufficient excavation space is particularly necessary for proper, careful backfilling under the tank.

The third installation performance standard concerns the selection, placement and compaction of backfill materials. As mentioned above, EPA feels that the backfill is an important feature of the installation and that many tank and piping failures can be prevented by careful attention to backfilling. In general, the backfill material must be a clean, noncorrosive, nonfree-flowing material such as washed sand or gravel. However, a specific type of backfill may be required by the manufacturer because of unique structural or coating features. The manufacturers also specify the thickness of lifts in which the backfill is placed, and the degree and method of compaction that must be used to support the tank and piping.

The fourth requirement is for supports and anchorage of tanks that are subject to high water tables or in flood prone areas. High water can create strong lifting forces on an UST, causing movement and structural failure if the tank is not properly supported. The possibility of a high water table that may result from flooding should be carefully considered when deciding whether anchorage and supports are needed. Surface water can fill the tank excavation area if the surface is not properly sealed. The tank manufacturers generally provide anchorage design information.

The fifth installation performance criterion concerns piping layout and installation. The Agency believes that unnecessarily complex piping layouts can complicate backfilling of the pipe system and lead to structural failure. Structural failure of the piping could also result from improper installation of the piping and piping accessories. Therefore, in today's proposal, EPA is requiring that the piping and piping accessories be installed in accordance with the manufacturer's instructions.

The sixth performance criterion is that the pipe joints must be cut accurately and deburred to provide liquid-tight seals. FRP pipe joints must be cut squarely and tapered cleanly to ensure a structurally sound joint. The tolerances and procedures for preparing FRP pipe joints are provided by the manufacturers. Steel pipe joints must also be prepared carefully to prevent failures. The pipe must be cut squarely and the thread cutting die must be sharp to produce tight fitting thread.

The seventh performance criterion is that swing joints or flexible connectors must be installed at the beginning and end of each line as well as where the line changes direction. Swing joints or flexible connectors prevent differential movement of the tank, piping and dispensing equipment from causing stress in the pipe. Swing joints can be constructed in several ways. A series of threaded elbows and connectors can be used with steel pipe. Flexible connectors can be used with either steel or FRP pipe.

The eighth performance criterion is that the tank and piping cathodic protection must be installed in accordance with the manufacturer's instructions, plans and specifications. Some of the cathodic protection systems have important layout and installation limitations. The manufacturers of these systems provide instructions on how to layout and install their systems.

The last installation performance criterion is that a tank and piping tightness test must be performed after the backfill is placed into the excavation area and before the tank and piping are placed into operation. This test must meet the same requirements as the tightness test in § 280.41(c)(1). API 1615 recommends performing this test as a final check that the tank and piping are properly installed. Eight states also require this test at new installations. The requirements for this test are similar to NFPA 329 requirements; however, EPA believes that the accuracy standard for the test in NFPA 329 cannot be met reliably. EPA is concerned that even with the other eight installation requirements that a final check of the tank and piping installations needs to be made. Tank and piping leaks could still occur even though the proper installation procedures are followed. The tightness test provides assurance that the tank and piping are structurally sound.

In addition to setting these nine performance criteria, the Agency is proposing today in § 280.20(d) to require that owners and operators certify that they have complied with certain requirements concerning the installation, leak detection, corrosion protection and financial responsibility associated with each new UST system. The Agency is proposing an amendment to the existing EPA notification form that must be submitted by owners upon first bringing an UST system into use. This proposed modification will cause owners and operators to indicate the manner in which the installation requirements have been met. EPA will require owners and operators of UST systems to use the Agency's form unless the states develop their own forms that require, at a minimum, the information required under the amended form. Other changes to the notification form are discussed later in Section 3 of this part of this preamble.

EPA has amended the notification form in a manner that makes it still easy to complete (in most cases, answers may be provided by checking a box) to minimize the burden on tank owners and operators, the majority of whom are small businesses. In the proposed form, the owners and operators are required to check off which of the six alternative methods were used to ensure proper installation of tanks and piping. There is also a provision for owners and operators to describe any other methods used to ensure proper installation.

For the purposes of complying with the certification requirements, an authorized representative of the owner and operator may sign the form. In addition to the owner and operator's signature, the tank installer must also sign the certification of compliance form.

The Agency requests comment on today's proposed installation requirements. In particular, EPA asks for comment and experience on checking a new tank system installation with a tightness test of the tank's and piping. The Agency is concerned that the tightness test may be redundant because new tanks are also required to have release detection. For example, is such a requirement necessary with double-walled tanks or UST systems provided with some method of frequent to continuous excavation zone monitoring? The Agency seeks comment as to when the tightness test should be performed. If the test is intended to detect installation errors, then should it be conducted after the tank system has completed any possible settling within the excavation area (e.g., 6 months or 1 year after installation)?

In addition to specifying key installation requirements in today's proposed rules the Agency is examining various programs and means of ensuring improvement of UST installations. A
a. Overview

Because of the potential problems associated with releases from UST systems, the proposed new tank performance standards require features designed to prevent releases, including: Proper tank and piping design, corrosion protection systems. Later in this preamble, additional requirements that are being proposed today to prevent or minimize releases from all new UST systems are discussed in more detail, including: Release detection methods; overfill/spill protection devices; and, in the case of hazardous substance tank systems secondary containment and interstitial monitoring.

The majority of the estimated 1.4 million existing UST systems regulated under Subtitle I do not presently include any of the release prevention and detection features that are being proposed today for new UST systems. In fact, EPA estimates that approximately 80 percent of existing UST systems are bare steel and about 80 percent of them are more than ten years old. Most owners and operators do not yet practice any form of release detection and have not fitted their tanks with overfill/spills control equipment. Fortunately, most existing UST systems can be retrofitted with many of these safeguards (for example, cathodic protection to prevent corrosion at bare steel tank systems), thereby upgrading them with some of the protections expected to be provided by the proposed requirements and standards for new UST systems.

Today, EPA is proposing in § 280.21 two different schedules for upgrading existing UST systems to the new tank system design and construction requirements just described, and to the release detection requirements discussed in Section VI.D of this Preamble. As discussed in more detail below, EPA believes that the implementation of these requirements should be phased in because of the enormous size of the existing UST universe, and the practical implementation difficulties that owners and operators face as they upgrade their tanks to the new tank standards.

b. Current Practices

Most of the major oil companies, and at least one of the larger convenience store chains, have embarked on phased programs to upgrade their retail motor fuel tank systems. In ranking these UST systems on a priority list that is based on factors believed to be associated with the probability of release, these programs typically take into account the age of the UST systems, their material of construction (protected steel or not), and the corrosivity of the surrounding soils. The highest priority UST systems are replaced as quickly as possible with protected single-walled UST systems equipped with spill controls. The next priority UST systems are quickly repaired and upgraded to new tank standards. The lowest priority UST systems are those that already meet new tank standards or are otherwise unlikely to leak and thus have little need to be upgraded.

EPA has also identified several other major companies storing hazardous substances who have already embarked upon UST system upgrading programs. In many cases, these tanks appear to be phased out and replaced by either aboveground storage tanks or underground UST systems provided with secondary containment.

The majority of state and local regulations addressing new tank specifications have requirements for corrosion protection, release monitoring, and overfill/spill protection. However, four jurisdictions also explicitly mandate retrofitting existing tanks to these new tank specifications. One state requires retrofitting only as an option to removing, abandoning, or extending the life expectancy of the UST system. Other states increase release detection requirements as the UST system ages, thereby prompting voluntary retrofit or retirement of the UST system. Generally, state and local regulations address the various upgrading topics individually. For example, of the 18 UST regulations that include retrofit requirements for existing UST systems, 6 require corrosion/cathodic protection, 1 requires secondary containment, and 3 require some type of release detection. Eleven regulations specify retrofitting systems with overfill protection, with 5 of the 11 also requiring spill containment. Two jurisdictions have regulations which mandate the upgrading of tank systems in all four areas (corrosion protection, secondary containment, release detection and overfill/spill protection). In summary, there currently appears to be wide diversity concerning requirements for the upgrading of existing tank systems at the state and local level.

The majority of states have not yet established comprehensive UST regulations. However, 18 states are enforcing at least one of the major national consensus codes. Of these consensus codes, only the Uniform Fire Code, 1985, has guidelines addressing retrofit technologies. Eight states without comprehensive UST regulations enforce this standard and appear to therefore adhere to this code's retrofit guidelines for corrosion protection and spill containment.

Two nationally recognized standards address the retrofit of cathodic protection on existing tank systems. They are the American Petroleum Institute (API) publication 1922, "Cathodic Protection of Underground Petroleum Storage Tanks and Piping Systems and the National Association of Corrosion Engineers (NACE) Recommended Practice RP-02-85, "Control of External Corrosion on Metallic Buried and Partially Buried, or Submerged Liquid Storage Systems."

Corrosion protection can be retrofitted to existing steel tank systems and is expected to be very effective in eliminating galvanic corrosion as a source of UST system releases. Such retrofitting is not an uncommon practice, and at least one major oil company and one major convenience store chain are retrofitting many of their unprotected steel tanks with corrosion protection. One corrosion engineering firm alone has retrofitted over 2500 tanks with cathodic protection. Because each UST site is unique in its exact requirements for adequate corrosion protection, in practice the retrofitting of corrosion protection must be designed for each specific site by a trained corrosion expert experienced in the protection of underground storage tank systems.

Although relatively inexpensive to do, it is critical that the retrofitting of cathodic protection only be undertaken by a trained professional. First, the corrosion engineer must gather a site history including detailed information on tank location, dimension, age, coating and lining, material of construction, type of backfill, anchor system, history of repair, and inventory problems. The engineer must also obtain information on possible interference sources (stray currents) and corrosion protection in place at nearby buried metal structures. Second, the corrosion engineer must do field testing. This includes measurement of structure-to-soil potentials, a site inspection, and at least one test boring at the end of each tank. The borings are generally used to produce analyses such...
ultimately determine which method can well. Most state Preamble, but they are generally release detection methods available for the first time. The wide variety of technology to the full array of necessary expertise and firms are available nationwide that offer the protection to existing bare steel settings, retrofitting of corrosion experts as a preferred system of corrosive soils. However, at sites with moderate to highly corrosive soils or with large bare steel tanks without any coatings, the analysis may reveal that sacrificial anodes cannot generate enough current to protect the system. In such cases, an impressed current system must be installed. Impressed current systems have been recommended to EPA by several highly experienced corrosion experts as a preferred system for retrofitting cathodic protection because impressed current can be used to protect any UST system in any soil conditions, and current output can be easily adjusted to changing conditions at the site.

Carefully applied in a wide variety of settings, retrofitting of corrosion protection to existing bare steel UST systems appears to have significant potential to forestall corrosion-induced releases that are otherwise inevitable in the future. It is a relatively inexpensive procedure when compared to the costs of UST system replacement. Several firms are available nationwide that offer the full array of necessary expertise and experience to correctly apply this technology. Application of this technology to the UST universe addressed by today's proposal will require an enormous expansion of their services, if many existing UST owners and operators decide to upgrade their unprotected UST systems instead of replacing them.

Existing tank systems can also be upgraded by applying release detection for the first time. The wide variety of release detection methods available for new tanks is discussed later in this Preamble, but they are generally applicable to existing tank systems as well. Most state UST regulations have some form of release detection requirements. While these regulations ultimately determine which method can be used, generally, the regulations offer the option of choosing among several release detection methods. Implementation difficulties anticipated with retrofitting of release detection to the large number of existing UST systems addressed by today's proposal has led EPA to conclude that these requirements must be phased in over a significant period of time. In particular, recent experiences from state UST program enforcement of their new release detection requirements corroborate this concern. Several of the most aggressive state UST programs have decided to phase in their release detection requirements over a 4- to 5-year period and have advised EPA that this is the quickest that the large universe of tank systems can be realistically addressed. (For example, both Florida and New York are phasing programs within this time frame). States attempting to require more immediate compliance have also discovered that actual compliance has taken much longer than originally intended (for example, this has proved to be the case in California, which tried to require release detection in one year but now reports that the phasing of release detection will take up to three years). EPA believes that the national UST program will experience these same problems. The current market conditions and technological capabilities of the release detection industry, the size of the regulated community, and the widespread lack of application of or familiarity with any release detection to date at most UST facilities indicates that requiring the immediate retrofitting of release detection at existing UST systems is not practical or achievable.

Another possible approach to release detection retrofitting is provided by interstitial monitoring. Technically, impermeable liners and vaults may be retrofitted to existing UST systems, however, they are very costly and impractical retrofit techniques. Installation of impermeable liners and vaults require the excavation and removal of the UST system and then its reinstallation. Currently, in the United States there is no widely available technology for retrofitting existing UST systems to provide double-walled protection. This form of secondary containment requires replacement of the single-walled UST with a double-walled one.

A potentially more simple retrofit technology that will provide existing tanks with a form of interstitial monitoring that can be continuously monitored is available in Europe and has been widely used for diesel fuel and heating oil tanks. Systems under development in this country for gasoline UST systems consist of coating the inside of the tank and then also retrofitting a membrane liner inside the tank to enable interstitial release detection in the space between the tank and liner. This offers several features that may make it a promising retrofit technology. However, it is only commercially available in this country on a very limited basis as a new technology, and must otherwise be imported.

Finally, in order to fully upgrade to the new tank standards being proposed today, all existing UST systems would also need to retrofit controls to address releases from spills and overfills. Releases from spills and overfills can be prevented by implementing a spill prevention program, which begins with the simple practice of good transfer techniques. These techniques consist primarily of assuring enough space is available in the tank to receive the load of product to be delivered, as well as to closely oversee the in-filling process to assure trouble-free transfers from the delivery truck. In addition, existing tank systems can be retrofitted with overfill/spill protection devices. There are already a variety of overfill/spill protection devices available that can be installed on existing tank systems, and several more are under development. Several current state UST regulations require existing tank systems to be eventually retrofitted with overfill/spill protection using one of several methods. (Spills and overfills are discussed in more detail in the next section of the preamble.)

c. Approaches to Regulation

The Agency has considered several approaches and requirements that could be used to upgrade existing UST systems as well as ways of phasing in the release detection requirements. The following discussions focus on the reasoning behind the approach proposed today as well as some of the alternatives considered during its development.

In summary, EPA is today proposing that all existing UST systems storing regulated substances replace the new tank standards over no longer than a ten year period. The proposed upgrading consists of several steps. First, in § 280.30(a), all existing UST systems are immediately required to institute practices for the careful filling of tanks to avoid spills and overfills. Release detection must be phased in § 280.40(c) within a 3- to 5-year period based on the type of tank
systems storing regulated substances to proposal requires all existing spill/overfill control equipment under standards, including the provisions for replaced to comply with the new tank permanently closed. Within ten years, effective method of release detection (i.e., the bare steel gradual upgrading or replacement to the new tank standards. As discussed within priorities for mandating the phasing in state and local programs the flexibility to take any of the different approaches described above (or some other approach) as long it is completed within this ten year period. Although this is the maximum time period allowed, EPA will encourage a more rapid transition where possible, so that the benefits of these improvements can be realized sooner.

(2) Phase-in of Release Detection at Existing UST Systems (Section 280.40(c)). Today EPA is also proposing in § 280.40(c)(1)-(2) to require that all existing protected single-walled UST systems have release detection within 5 years of the effective date of the final regulation, and the more leak-prone bare steel UST systems within 3 years. This means that the vast majority of existing UST systems will be required to have release detection within three years. State experiences to date suggest that this timeframe will be difficult to achieve with a regulated universe of this size. EPA does not believe that this implementation can take place in less than this time frame. Upgrading all existing UST systems with any one of the proposed release detection methods being proposed today will generate a tremendous new demand for services. It is doubtful that system manufacturers and installers could supply their products and services to all UST owners and operators in a reliable fashion that would ensure full compliance in less than three years. More rapid implementation is made even more difficult by the fact that today's proposed requirements will cause release detection to be applied to the vast majority of existing UST systems for the first time.

As is discussed later in today's proposal (see Section VI.D.), the Agency expects many owners and operators of existing UST systems to choose the combined infrequent tank tightness testing and inventory control method during the 10-year interim period allowed for upgrading all USTs to the new tank standards. They are the most widely used methods today and require the least (as most common by reported cause of releases today) should be significantly less frequent at these UST systems.

Another approach that the Agency considered for phasing in release detection was to base the phase-in on tank system age instead of tank system type. Because EPA has some evidence that older existing UST systems are more likely to leak (because they do not have corrosion protection) than younger tanks, release detection could be required sooner at the older UST systems than the younger ones. For example, UST systems over 15 years in age (as well as those of unknown age) could be required to phase in release detection within two years, the UST systems between 5 and 15 years old within 4 years, and the most recently-installed protected UST systems within 5 years. This alternative approach could have similar practical impacts, however, because most of the protected UST systems have been installed recently and, thus, would be phased in last under both approaches. The major difference between these two phase-in approaches is that the older USTs would be required to have release detection much sooner under the alternative approach. The Agency solicits comments and information pertaining to

(i.e., the bare steel UST systems before the protected systems). All UST systems that cannot apply a reliable and effective method of release detection within those time frames must be permanently closed. Within ten years, all UST systems must be retrofitted or replaced to comply with the new tank standards, including the provisions for corrosion protection under § 280.21 and spill/overfill control equipment under § 280.30(c).

(1) Basic Requirement for Mandatory Upgrading or Closure of Existing UST Systems (Section 280.21). Today's proposal requires all existing UST systems storing regulated substances to be upgraded to the new tank standards within 10 years or be closed. EPA believes the present unprotected condition of most existing UST systems provides the greatest and most immediate threat to human health and the environment. A significant level of future releases can be avoided if these UST systems are upgraded or replaced to the new tank standards. As discussed earlier in Section V of this preamble, the Agency has decided to propose a gradual upgrading or replacement approach as the most feasible and implementable within this large regulated universe. The regulatory impact analysis described in Section IX estimates that significant environmental benefits will result from upgrading or replacing all UST systems within 10 years. Upgrading would generally consist of instituting a corrosion protection system and some spill and overfill equipment at the typical tank system. By proposing to give the regulated community the flexibility to plan for and set their own priorities in upgrading their UST systems, EPA intends to encourage a more rapid upgrading to take place voluntarily. It also provides state and local UST programs the flexibility to establish their own priorities for mandating the phasing in of the needed improvements. Several states and local programs are already using the age of the UST systems to trigger mandatory upgrading or replacement.

As an alternative to the proposed approach, EPA has also considered several other ways of requiring UST systems to be upgraded within the proposed 10-year period:

• All UST systems could be required to replace or upgrade based on age, phasing in required improvements at the oldest tank systems first.

• Separate milestone years could be identified for different stages of the upgrade. For example, release detection, spills and overfill controls, and cathodic protection, could be required by different cutoff dates. The tank owners could upgrade as quickly as they desired as long as they also met these individual milestone dates.

• All UST systems could be required to upgrade or replace only if and when they leaked. This approach is used by several states, including South Carolina, New York, and California (with hazardous substance tanks).

EPA decided to propose in § 280.21 that all upgrading or replacement of substandard existing tank systems simply be completed within 10 years. This approach is believed to complement numerous current industry trends towards upgrading or replacing UST systems voluntarily, while also setting a maximum time limit within which the benefits of upgrading must be obtained nationwide. EPA believes that the proposed maximum 10-year time period will allow existing UST owner and operators numerous ways of planning an orderly transition towards achieving the protections afforded by new tank requirements. This target approach is also believed to have the distinct advantage of providing states and local programs with the flexibility to take any of the different approaches described above (or some other approach) as long it is completed within this ten year period. Although this is the maximum time period allowed, EPA will encourage a more rapid transition where possible, so that the benefits of these improvements can be realized sooner.
the benefits that could be obtained by phasing in release detection based on age instead of tank system type. Information is also solicited concerning data that may further reveal whether, to what extent, older tanks and piping may pose a significantly more of a threat to human health and the environment than younger tank systems.

(3) Accelerated Upgrading or Closure of Existing UST Systems that Cannot Meet Release Detection Requirements (Section 280.40). Today's proposal (in § 280.40(c)(3)) requires all existing UST systems that cannot provide a method of release detection that meets today's proposed requirements to be closed within 3 to 5 years. This requirement is based on the Agency's conclusion that all existing UST systems, particularly those unprotected from corrosion, must have a method of release detection to protect human health and the environment. Thus, UST systems unprotected from corrosion and without release detection would have to be closed before the end of the 3-year phase-in period that would begin on the effective date of the final regulations. Similarly, protected UST systems without release detection would have to be closed before the end of the 5-year phase-in period proposed today.

(4) Request for Public Comment. The Agency is requesting comments on today's proposed schedules for implementing this program: including the requirements for the upgrading of existing tank systems and the scheduled phase-in of release detection. Comments and information are specifically requested in the following four areas:

- Is the proposed 10-year limit for upgrading existing UST systems appropriate? Would certain components of these required improvements be mandated sooner (for example, see the next section of this preamble concerning the phase-in of spills and overfill equipment)? Should the states and UST owner/operators be allowed to set their own priorities in upgrading to the new tank standard?
- Are the proposed requirements to upgrade release detection, corrosion protection, overfill/spill protection, and, in the case of hazardous substance tanks, upgrading to secondary containment adequate? For example, is it necessary for steel UST systems being retrofitted with cathodic protection to also be required to have an internal coating applied to the inside of the tank to ensure corrosion is prevented?
- EPA has been informed by several experts in the corrosion-protection field that impressed current corrosion protection is the preferred technology for retrofitting existing tanks. For retrofit purposes, should only the use of this technology be allowed or should EPA also allow retrofit of sacrificial anodes to existing bare (or inadequately coated) steel systems?
- Current recommended industry practices (API) include the use of structural integrity standards to determine if an existing tank is sound enough to be repaired, because it is unreasonable to cathodically protect and otherwise upgrade a tank that is in imminent danger of leaking. The Agency specifically requests comments on what minimum structural integrity requirements may be needed to ensure an existing tank system can be safely upgraded to the new tank standards. Information is also solicited concerning methods and expenses associated with assessing existing USTs to determine whether they should be upgraded.

3. Notification Requirements (Section 280.22)

On November 8, 1985, EPA published the Final Rule on Notification Requirements for Owners of Underground Storage Tanks (50 FR 46602). Included in that rule was the notification form. Owners of existing UST systems were required to fill out and submit the form to their designated state or local agencies by May 8, 1986. This earlier notification complied with the requirements of section 9002(a)(1) of the federal statute. Section 280.3(c) of the November 1985 final rule (which today's proposal redesignates as § 280.22) also required owners and operators who bring UST systems into use after May 8, 1986, to notify the designated state departments or agencies within 30 days of installation. Such notification by new UST systems should be made using the November 8, 1985, federal form, as modified in today's proposed rule, or an approved alternate state notification form.

Beginning 30 days after the issuance of the final regulations resulting from today's proposal, § 280.3(h) of the November 1985 rule (which today's proposal redesignates as § 280.22) requires any person who sells a tank intended to be used as an UST system to notify the purchaser of such tank of the new owner's notification obligations under the regulations.

Owners who place new UST systems into use should note that we are today not proposing to modify the notification form promulgated in November 1985, except to require additional information regarding certification of the methods used to comply with the installation, financial responsibility, release detection and corrosion protection requirements. In particular, the proposed modification to the form requires the installer of the new UST system to sign the form along with the owner. This information has been added to the form so that EPA can be assured that the installation has been completed competently.

C. General Operating Requirements

1. Spill and Overfill Control (Section 280.30)

As discussed earlier in Section III, spills and overfills can occur in a variety of ways, usually as the result of human error. Because spills and overfills account for at least 15 percent of all state-reported petroleum releases, EPA believes that incidents of spills and overfills should be addressed in future regulations. Thus, EPA is proposing today to require spill and overfill controls.

The situation can be improved markedly through the use of any of the following:

- Proper operating procedures to include measuring the available capacity in the tank and using dry-disconnect couplings on all transfer hoses;
- A liquid level sensor with an alarm that is triggered when the liquid reaches a predetermined level;
- An automatic shutoff device that is triggered when the liquid reaches a predetermined level; and
- A spill catchment basin located around the fill pipe.

Many of these types of devices can be used to provide protection on either new or existing tank systems.

EPA considered several alternative regulatory approaches to reducing spills and overfills. One approach was to require specific design and construction techniques to be implemented at all UST sites, both new and existing facilities. This approach, however, in certain respects deprives the states of the ability to require different types of solutions based on site-specific information concerning the location of the UST system with regard to valuable underground water and potable water sources, the type(s) of product to be stored, and the likelihood of overfills and spills causing significant adverse effects on human health and the environment. Thus, EPA chose instead to allow the use of any of the above techniques to address the problem.

Overfill and spill prevention requirements are recommended in most national association and industry standards as well as the majority of available state regulations. The proposed approach allows the states to
require all tank owners and operators to retain the variability currently in their regulations while staying within the minimum national standard provided by EPA. There is currently no data available to suggest that one approach to the elimination or reduction of overfills and spills is more effective than any other.

In § 280.30(a), EPA is proposing a general performance standard that will require all tank owners and operators to ensure that releases due to spills or overfills during product transfer or delivery do not occur. Owners and operators of all tank systems must ensure that the owner gauges the tank gauge to determine that the capacity available in the tank is greater than the volume of product to be transferred. This measurement is the logical, necessary first step in preventing overfills—it assures that there is enough empty space for the product being delivered. The owners and operators must also ensure that other proper product transfer procedures are followed, such as overseeing the transfer operations, drawing the hose carefully before disconnecting it, and using dry-disconnect couplings.

Under § 280.30(b), all new tank systems must be equipped with spill and overfill protection by installing one or more of the following devices:

- A liquid level sensor with an audible or visual alarm that is triggered when the tank reaches 95 percent of its capacity;
- An automatic flow shut-off device that is triggered when the tank reaches 95 percent of capacity;
- A spill catch basin around the fill pipe; or
- An equivalent device approved by the appropriate regulatory authority. This requirement is built upon the list of recommended spill and overfill protection equipment set forth in NFPA 30. Proper product transfer procedures are discussed in NFPA standard 385 and in API Bulletin 1121 “Recommended Practice for Bulk Liquid Stock Control at Retail Outlets” describe, among other things, the requirements for the use of tight fill connectors and the need for the tank truck operator to oversee the transfer.

When existing tank systems are upgraded to new tank standards, or when external monitoring wells are put in place, the owner and operator must ensure that the system complies with the new tank design standards for overfill protection. As discussed earlier in this preamble (see general requirements for release detection), existing and new spills may confound external-to-the-tank sensors and preclude the detection of a release from the UST system. Thus, today’s proposal requires that any existing UST system using external release detection be provided with spill and overfill equipment.

There are several options for upgrading of overfill and spill equipment. One regulatory approach would be to require upgrading to new tank overfill and spill standards on the same schedule as the leak detection phase-in (i.e., 3-5 years). A second approach would be to require the retrofit of overfill and spill protection at the same time that corrosion protection of existing UST systems must be upgraded to new tank standards (i.e., within 10 years). The earlier phase-in (3-5 years) would help prevent overfill releases that would otherwise trigger alarms on newly installed external monitors. Florida, for example, requires monitoring and overfill protection retrofits simultaneously, at an earlier date than corrosion protection.

Comments are requested on this issue of which time frame is most appropriate for phasing in spill and overfill equipment at existing UST systems.

The Agency has decided to propose in § 280.30(c) a 10-year deadline for upgrading overfill protection at all existing UST systems to the level provided by the new tank standards. During the intervening period, owners must use improved product transfer procedures (§ 280.30(a)). There are two major reasons for tying phase-in of overfill equipment to the cathodic protection retrofit requirement. The first is simplicity—keeping all the leak prevention upgrades requirements scheduled together will be easier to implement and more easily understood by the regulated community. The second is related to available technology. For several years, European countries have relied predominantly on overfill prevention as opposed to overfill and spill containment. These new types of prevention devices, both foreign and domestic, appear to be just beginning to enter the American market. A short upgrade deadline could force tank owners toward the overfill and spill containment equipment that is readily available now. A longer upgrade period gives the marketplace more time to adjust and could allow technological advances recently introduced more time to be made available.

2. Operation and Maintenance of Corrosion Protection (Section 280.31)

a. Background

Proper operation and maintenance of corrosion protection systems can reduce the incidence or volume of releases due to corrosion. Corrosion was found to be the single most common cause of releases in existing underground tank and piping systems reported by State and local officials in the two EPA State Release Incidents Studies. All presently available studies of UST releases and their causes cite corrosion as the leading cause of failure in the existing unprotected steel tank systems.

Today’s proposed rule requires corrosion protection of all new steel tank systems as the means of preventing corrosion. All existing steel tanks systems will have to be upgraded to include corrosion protection within 10 years. In order to be effective, these corrosion protection systems must be inspected and maintained. Corrosion protection systems can fail in a number of ways. For example, cathodic protection systems can fail in a number of ways. For example, cathodic protection can break, sacrificial anodes can be consumed, impressed current can be shorted or otherwise fail, adequate potential may not be maintained. Proper operation and periodic maintenance of these systems can avoid all of these potential problems.

b. Current Practices

The National Association of Corrosion Engineers (NACE) provides guidance on the proper design, installation, operation, and maintenance of corrosion protection for steel tank systems. In particular, NACE provides standards for cathodic protection systems. In Chapter XIII of its publication “Guide for Inspection of Refinery Equipment,” the American Petroleum Institute (API) has also developed recommended practices for the proper inspection and maintenance of corrosion protection for tank systems.

Over fifteen states already have requirements concerning the monitoring of corrosion protection systems. Seven require monthly inspections of impressed current rectifiers; nine require annual site inspections by a qualified person; one requires semi-annual inspections; and two require these inspections after the first year of operation and every five years thereafter. Most of these states require that the site inspections include measurements of the structure-to-soil and structure-to-structure potential as well as rectifier voltage and current readings.

Under the Hazardous Waste Tank Rules, inspections of corrosion protection for underground tank systems are required. Cathodic protection must be inspected at least annually. However, those systems with impressed current must be inspected at least every other month. Under Subtitle I, the Interim...
Prohibition (Section 9003(g)) does not explicitly require the maintenance of corrosion protection at new UST systems. However, as explained in EPA's Interim Prohibition Guidance Manual, the performance of corrosion protection should be monitored periodically.

c. Today's Proposal

Today's proposed rule requires that all corrosion protection systems be operated and maintained to continuously provide corrosion protection to the metal components of an UST system. The Agency has not specifically addressed the issue of whether all metal components on a FRP tank or pipe should be protected by cathodic protection, but only requires that corrosion protection be provided. The Agency considered requiring cathodic protection for all metal components because of potential failure of such components (e.g., pumps, pump housing and fittings). Because such a requirement could be construed to cover other metal components such as striker plates, bushings, and bunghole covers, the Agency has not incorporated the requirement in today's rule. The Agency does not have sufficient data on failures of these individual metal components on a FRP tank or pipe to determine that this level of protection is needed. The Agency invites comment on which components, if any, should be cathodically protected, whether there are noncorrodible, metal alternatives for these components, and what form of corrosion protection is appropriate if cathodic protection is not required.

In today's proposed rule, EPA is proposing two different inspection schedules for coated steel tanks and piping with cathodic protection. After the initial inspection, it is proposed that factory installed cathodic protection systems (such as those included with slit.P® tanks) be inspected at least every five years. All other cathodic protection systems on steel tanks and piping are to be inspected at least annually after the initial inspection. The less frequent inspection interval for the factory installed cathodic protection is proposed because of the stringent fabrication and installation standards for these tanks. EPA feels that there is less chance of damage to, or failure of, the factory installed cathodic protection systems that are built to national fabrication requirements (e.g., slit.P® tanks) than for field fabricated systems. Generally, these factory installed systems have 30 year limited warranties provided by the tank manufacturer.

For field fabricated cathodic protection systems, EPA is proposing that the NACE standard for inspection intervals (not less than once per year) be adopted. EPA feels that this more stringent inspection standard is appropriate because there is more potential for faulty installation of these systems and for damage to the system either during or after installation. All steel piping will be subject to this requirement. The annual inspections required by NACE RP-02-85 (and the five year inspections noted above) ensure that adequate corrosion control has been achieved for underground steel structures by observing the following criteria:

- A negative (cathodic) potential of at least 0.65 volts as measured between the structure and a saturated copper-copper sulfate (Cu-CuSO₄) reference electrode contacting the soil; or
- A negative (cathodic) potential shift of at least 300 mv as measured between the structure and a Cu-CuSO₄ reference electrode contacting the soil. This shift is the difference between the unprotected potential and the potential with the protective current applied; or
- A negative (cathodic) polarization potential shift of at least 100 mv measured between the structure and a Cu-CuSO₄ reference electrode contacting the soil. This shift is the polarization decay which is determined immediately after the protective current is interrupted.

There is currently a proposal before a technical practices committee of NACE to revise the criteria for determining that cathodic protection systems are functioning properly. The proposed revisions would refine some criteria and there is discussion of deleting other criteria entirely. The Agency is today proposing that cathodic protection be monitored according to currently applicable NACE criteria. In the event these criteria are modified in the near future, the Agency will evaluate at that time whether to make parallel changes in its final regulations.

NACE RP-02-85 recommends more frequent inspection intervals where indicated by operating experience. The annual and bimonthly inspection requirements are therefore minimum requirements. In accordance with the NACE code, the bimonthly inspections of impressed current systems can be done by the owner or operator, and do not require the services of a corrosion expert. The third requirement, that the corrosion protection system be operated and maintained to protect the tank system from corrosion, effectively requires more frequent inspections when warranted.

As mentioned previously, the Agency is aware that some tank manufacturers recommend less frequent inspection intervals for coated tanks that have galvanic type cathodic protection systems attached to the tank body. The Steel Tank Institute recommends inspection by a corrosion expert of the cathodic protection system on this type of tank system one year after installation and every five years thereafter. The Agency seeks comments on the advantages and disadvantages of allowing less frequent inspections for those tank systems that are equipped with premanufactured corrosion protection.

In addition to the minimum requirements for inspections at least once per year or once every five years, today's proposal also requires testing or inspection of impressed current systems on a bi-monthly basis. The rule also specifies that those inspections that are required at least once a year or at least once every five years be conducted by a qualified corrosion expert. The bimonthly impressed current test or inspection, however, may be conducted by employees of the owner or operator, provided the employee has been trained in the procedural steps for conducting and recording the results of the inspection or test. This distinction is made because the less frequent inspections require a complete knowledge of cathodic protection systems, their modes of failure or malfunction, proper diagnostic procedures, proper data interpretation and corrective action options whereas the bi-monthly inspection or test is principally a matter of visually verifying that the system is operational and performing adequately.

d. Inspections

The Agency has considered a range of alternatives for the required operation and maintenance of tank systems. Three alternatives included considerations for requiring maintenance and inspections for (1) the entire site, (2) the tank system equipment, and (3) the corrosion protection systems only. For each of these three approaches, consideration was given to whether the requirements should apply to new tank systems only or to all tank systems. The Agency also considered a general performance standard which would simply require that the tank system would be maintained in proper working order.

The site inspection alternative could cover inspection of (1) piping and auxiliary equipment, (2) instrument controls and electrical systems, and (3)
concrete pads, foundations and surrounding flora and soils. These are discussed in more detail below.

(1) Piping and auxiliary equipment. All accessible piping, pumps, valves and fittings could be visually inspected for leaks, proper supports, proper alignment, external corrosion, and signs of fouling. Pumps and valves could be checked for leaking seals or other signs of mechanical wear.

(2) Instruments, controls, and electrical systems. These systems could be checked for proper power supply, signs of leaks or corrosion, integrity of mountings and enclosures, proper lubrication and adverse environmental conditions.

(3) Foundations, pads and surrounding areas. Concrete bases for pumps or other equipment could be checked for deterioration, erosion settlement, cracks, or spalling. Concrete pads and surrounding soil could be checked for subsidence, unexplained moisture spots and deterioration. Grass and other flora around the concrete could be checked for damage that could be caused by releases.

The second option, to inspect tank system equipment, would principally encompass item number 1 from the Site Inspection Alternative. Such an inspection could cover some items from item numbers 2 and 3 of the Site Inspection Alternative. For example, equipment foundations could be inspected for cracks and settling and the equipment could be checked for proper anchoring. Similarly, visual checks could be made of instruments, controls, and electrical components associated with various equipment items.

The Agency considered requiring an inspection for tank deflection as part of a tank system inspection. As the tank and surrounding soils shift due to settlement, aging and frost heave, the tank may be distorted from its original shape. Small distortions are expected at most installations and the tanks are designed to withstand them. However, failure of the tank's backfill or foundation anchors can lead to excessive distortion of the tank and rupture. This type of failure, while not widespread is reported to occur most often in FRP tanks. One way to measure this tank distortion is to measure the inside height of the tank and compare it to the original design height. If this tank deflection exceeds a limit which depends upon the design and size of the tank then the tank could be expected to rupture and cause a release. At least two FRP tank manufacturers require a measurement of tank deflection after installation to assure proper backfill placement. If the deflection exceeds two percent of the original diameter, the tank must be reinstalled. The Agency is not aware of any tank inspection programs that include regular, periodic tank deflection tests and is today seeking comment on industry experience with tank deflection measurement programs. EPA specifically requests comments on the advisability of EPA requiring periodic tank deflection measurements for steel and FRP tanks as a means of preventing tank failures. Of particular concern is how EPA could set a deflection standard for the different tank styles and materials of construction.

The third option, to inspect only the corrosion protection system, is a subset of the tank system equipment inspection. In this option, only the corrosion protection system would be inspected regularly to ensure continued corrosion protection for steel tanks. Two types of corrosion protection system inspections were considered. One type of corrosion protection system inspection is the inspection of the cathodic protection of steel tanks and piping. This type of inspection is described earlier in this section of the preamble.

The second type of corrosion protection system inspection considered by EPA evaluates the integrity of the cladding on composite tanks. As described earlier in this preamble under performance standards for new UST systems, the Agency is concerned about the corrosion protection performance of composite tanks. In the absence of definitive performance data, the corrosion resistance of composite tanks is a subject of continuing debate. Measuring the rate of corrosion or the integrity of the cladding would provide confidence that the cladding on a composite tank is protecting the tank from external corrosion.

Theoretically, the rate of corrosion could be measured by determining the electrical current flowing between the tank and the surrounding soil. This current is proportional to the rate of metal oxidation or corrosion. However, the Agency is concerned that this current is difficult to reliably measure because it could be masked by the current from other metal structures and environmental factors.

The integrity of the cladding could be determined by a test similar to the holiday test that is used to test the integrity of a coating or cladding prior to installation. In this test an electrical potential is induced between the tank and a metal rod that is inserted in the surrounding soil. Current flow between the tank and the rod could indicate a gap or holiday in the cladding. EPA requests comments on the advisability of requiring corrosion protection inspections for composite tanks. The Agency is particularly interested in comments and field data regarding experience in conducting these tests and their ability to indicate failures in coatings and claddings.

The advantages and disadvantages of each of the above three general approaches to inspection requirements are not clearly established. The Agency is today seeking public comment and information on whether there is a need to have a broader requirement that addresses the maintenance and inspection of the entire site or other tank system equipment. The Agency presently has several reservations with these approaches, however, because the general site inspection and the tank system inspection alternatives may be duplicative of the release detection requirements. Release detection systems have been proposed that should provide effective warning of releases from all components of the tank system, thereby reducing the need for general inspections. Also, because the vast majority of underground tank systems are completely underground and inaccessible to inspection, an inspection requirement appears to promise little practical benefit. Finally, our scrutiny of the numerous state and local programs in place or under development reveals that they do not consider those broader requirements for inspection to be necessary. Therefore, the Agency is proposing to require regular inspection and maintenance of the cathodic protection systems only.

3. Compatibility (Section 280.32)

a. Overview

In proposing a regulation on compatibility, the Agency intends to prevent tank system structural failure due to chemical and physical interaction between the stored substance and the tank system material. A compatible substance will not interact with the tank system to undermine its integrity or promote its corrosion. While no stored substance is totally inert with respect to the materials of a tank system, compatibility exists when such interaction is minimal and does not result in structural failure or corrosion-related releases during the operating life of the tank system.

Issues of compatibility differ depending on the tank material used. Compatibility with metal tank systems means that chemical and electrochemical internal corrosion is held to a minimum. For plastic
materials, compatibility means that the dimensional, physical, and mechanical properties of the materials are not eroded by the chemicals stored. For tank linings, compatibility means that material stored does not cause blistering, underfilm corrosion, and internal stress or cracking. Compatible materials will not be able to permeate the lining to cause corrosion or deterioration of the tank.

Incompatible substances can attack metallic and FRP tanks in different ways. The interior of metallic tanks can be subjected to various corrosive attacks. The stored substance or impurities within it may be corrosive agents, or either one may act as a catalyst enabling the other to corrode the tank. Corrosive processes are themselves complex. In certain cases, the process is self-limiting, because an oxide film is deposited over the corrosion site and inhibits further corrosion. In other cases, the oxide film may enhance the corrosive process. Also, agitation caused by inflows or outflows may dislodge the film.

Incompatible substances subject plastic tanks to physical deterioration in several ways. Incompatible substances may chemically react with and alter the mechanical properties of the tank system, resulting in structural failures. Solutio, a process in which the stored substance is absorbed into the plastic tank, may cause the tank material to warp, soften, weaken, or become brittle. Also, the stored substance can interact with the tank while the tank is under stress, as when under a heavy load, to produce environmental stress cracking. In this way, an incompatible substance can initiate cracks that could lead to structural failure.

Trace impurities can also cause incompatibility. For example, a few parts per million of chlorine in solution can quickly break down a protective oxide layer on stainless steel and lead to corrosion. Also, while hydrochloric acid is compatible with polyvinyl chloride, trace levels of benzene will allow the HCl to deteriorate a PVC tank or pipe.

EPA's review of available information concerning the causes of releases indicates that incompatibility is not frequently reported as a cause of releases. In fact, incompatibility was not even listed as a cause of releases in several analyses. Available data further suggest that most petroleum products stored in underground tanks—the major portion of the UST regulated community—are compatible with most of the common tank and pipe materials available. However, EPA does have information on releases caused by the incompatibility of hazardous substances with tank system materials.

Two situations require owners and operators to address the issue of compatibility. First, adequate care must be taken in the initial match of tank and pipe material to stored substances. Second, owners and operators must carefully consider the use of existing tanks for substances other than those originally stored. It is conceivable that a lack of care in ascertaining the tank or pipe material could lead to the storage of an incompatible substance.

Also, it has been suggested to EPA that additives to substances may be altered over time and cause future compatibility problems. For example, alcohol blends in gasoline may have harmful effects on FRP tanks. However, the Agency has not been able to document any instances of releases due to this type of incompatibility. The increasing use of fiberglass tanks by many of the major oil companies may mitigate against the use of new additives that could undermine the structural integrity of FRP tanks.

b. Current Practices

Industry groups, such as ASTM, NACE, and UL, have established tests and criteria evaluating different aspects of compatibility. Many of these are tests of physical properties evaluated before and after the material is placed in contact with the substance to be stored. If the property change is within prescribed limits, the substance is said to be compatible. Different tests of compatibility can be chosen based on the substance to be stored, tank material, and environmental conditions of the site. Because of the variability in these factors, no compatibility test applies to all circumstances.

Tank manufacturers generally take responsibility for disseminating information on their tank's or pipe's compatibility with various substances. Manufacturers will also test a potential customer's substance to ascertain compatibility or, in the case of FRP to design a customized compatible resin. Some FRP tank manufacturers have extensive R&D programs to develop new resins resistant to specific substances.

Of 22 state and local UST programs that were evaluated, 8 specifically address compatibility through a general requirement that all tank owners and operators use compatible materials and substances. In addition, 15 states base their UST regulation in large part on one industry code—National Fire Protection Association 30—and reference it as a general performance standard. NFPA 30 requires compatibility between the stored substance and the tank material.

Under Subtitle I, the Interim Prohibition requires all new tank systems to be compatible with the substances stored. As stated in "The Interim Prohibition: Guidance for Design and Installation of Underground Storage Tanks," EPA expects new tank system owners and operators to work with manufacturers to ascertain compatibility.

c. Approaches to Regulation

One of several approaches to compatibility that the Agency considered would require specific test protocols for compatibility. However, available information suggests that because no one compatibility test or set of tests would adequately cover all circumstances, such an approach would not be appropriate.

The Agency also considered a requirement that all tank owners and operators test for compatibility before placing the substances in the tank system. However, the compatibility of many substances is already well known and thus requiring all tank owners and operators to conduct compatibility tests should not be necessary.

The Agency also considered a requirement that tank owners and operators certify compatibility, particularly at existing tank systems which have had new or different substances introduced into the tank system. As mentioned above, this has been rused as a concern with respect to changes in gasoline blends that are stored in FRP tanks. There is also concern regarding the introduction of new substances into existing tanks where the precise nature of the tank material or lining is unknown. The Agency solicits comment on this issue and on whether some type of compatibility certification is necessary or appropriate for addressing such concerns.

d. Proposed Regulation

The Agency believes that the existing mechanisms for establishing compatibility are generally adequate and do not need to be improved by regulation. Manufacturers have taken the lead to demonstrate compatibility as an outgrowth of their desire to sell their equipment. Established test protocols are used, and manufacturers are accountable for their intended use. As a result, today's proposal represents no change from the Interim Prohibition.

Today EPA proposes a performance standard requiring all tank system owners and operators to ensure the compatibility of the tank or piping with the regulated substance stored. EPA
believes this simple approach is sufficient given the minor role incompatibility appears to play in release incidents.

With this approach, the Agency intends to allow significant flexibility for state programs, while establishing a simple basic performance standard that prohibits any deterioration of any tank system due to incompatibility.

EPA expects that this standard will be easily satisfied by the regulated community. Compatible tank and pipe materials are well known and are already widely used to store the bulk of the substances regulated under Subtitle I. When new substances are to be stored in existing tanks or when new tanks are to be used for “unusual” substances, the Agency expects the owners and operators to take steps to ensure compatibility. These steps may include simply checking with the manufacturer, requesting the manufacturer to show compatibility, or commissioning compatibility tests.

A precaution that EPA has considered adding to this proposed rule is a requirement that all fill ports on new UST systems be equipped with a collar label that would provide information regarding the products which can be safely stored in the UST. This rule would require the owner and operator to check the collar prior to inserting a new product into the tank. The Agency is concerned, however, that it would be difficult to provide both complete and accurate information in such a condensed form. EPA solicits comment on this and other approaches of ensuring that all stored substance is compatible with the UST system.

4. Repairs Allowed (Section 280.33)

a. Overview

The repair of an existing bare steel tank typically involves the correction of deficiencies in the tank: repairing broken seams and welds, plugging corrosion-related holes, and applying an interior lining to extend the useful life of the tank. The application of the lining is an integral part of the repair process and consists of the application of a protective material to the entire interior surface of the tank. Pipes, fittings, and joints are not normally lined as part of this process due to the difficulty of applying the lining material in such confined spaces.

An existing steel tank is lined for two reasons: To provide additional internal corrosion protection and to repair tank systems that are not tight. In both cases, the lining is applied to extend the useful life of the tank.

Internal lining of an existing steel tank is a retrofit method that has been employed since the 1950s. (Both steel and FRP tanks can be lined internally provided they meet basic structural integrity requirements.) The American Petroleum Institute Bulletin 1631, “Recommendations for the Interior Lining of Existing Underground Storage Tanks,” states that the following minimum standards must be met before a steel tank can be repaired:
- A tank may have no open seam or split more than 3 inches long;
- A tank may have no perforation larger than 1.5 inches in diameter, except under the gauge opening where the perforation may be no larger than 2.5 inches in diameter;
- A tank may have no more than 5 perforations (all less than 0.5 inches in diameter) in any one square foot area;
- A tank may have no more than 20 perforations (all less than 0.5 inches in diameter) in any 500 square foot area;
- Before measuring the diameter of perforations and the length of seams and splits, these openings must first be reamed until their edges are a minimum of ¼ inch thick; and
- If any of these criteria are not met, the steel tank should not be repaired and lined. Tanks not meeting these criteria may not be structurally sound and should be closed permanently.

Usually FRP tanks are patched, rather than lined, with fiberglass matting and resin. For FRP tanks, the interior diameter of the tank should not have compressed more than one percent from its original measure in any direction. Tanks that have compressed more than one percent may be in danger of eventual failure and should not be patched. Patching is unable to provide the added structural support needed for such tanks.

b. Current Practices

Eight of the 21 states with regulations addressing tank repair refer to API 1631, the Uniform Fire Code, or similar guidelines. These guidelines include sections on tank purging, lining selection, tank manways, tank interior preparation, lining application, and tank sealing.

Currently, the Western Fire Chiefs Association is evaluating a proposal to eliminate from the Uniform Fire Code (UFC) the option of lining underground tanks in place. EPA plans to track the outcome of this proposal, and monitor industry efforts to develop improved recommended practices and consensus codes for tank repairs in response to the UFC proposal. The final rule may differ somewhat from today’s proposal as the consensus codes upon which they are based may be changed in the near future.

A few companies account for over 99 percent of the services associated with lining of steel underground tanks in the United States. Contractors throughout the country are affiliated with these companies and perform tank lining according to the parent companies’ stringent specifications. When the lining is installed in accordance with company specifications, it comes with a 10-year limited warranty against internal corrosion and defects in the lining materials.

Although the cost for removal and replacement of tanks is often significantly higher than the cost of lining a tank, tank owners and operators must evaluate these specific requirements based on operational needs and the technical feasibility of upgrading the existing tank.

c. Approaches to Regulation

One possible approach to repairs would be to prohibit any tank system repairs. If a tank system were found to be leaking, it would need to be replaced, or closed in accordance with applicable closure procedures. This regulatory option appears to be inappropriate because EPA has no definitive data to indicate that tank repair, if performed properly, does not work, and because a number of states currently permit tank repairs in their regulations. In addition, the choice of this regulatory option would prevent the use of an approach that may be particularly attractive to small businesses and which are able to make technically sound repairs to their existing tanks.

Another approach would be to allow unlimited repairs to the tank and its associated piping. This approach does not appear prudent because a tank system that leaks more than once indicates a propensity for failure that, given the consequences to the environment, is not worth risking.

In addition, the lining of pipes, joints, and fittings is not a viable method of repair. Wrapping or coating the leaking joint or section of pipe may under field conditions actually cause increased corrosion problems due to trapped moisture or incorrect coating application. It is typically more effective and less expensive to replace the leaking joint or section of pipe.

d. Today’s Proposal

Today’s proposed regulation diverges somewhat from the regulations for hazardous waste tank repairs. Under the Subtitle C regulations, repairs to existing hazardous waste tanks are allowed only
if they are extensive enough to constitute complete upgrading to the new tank standards (i.e., secondary containment). The system must also be tested and its integrity certified before it can be put back into service. A goal of the Subtitle C regulations is to replace or upgrade all tank systems with secondary containment as soon as possible, focusing first on leaking and old tanks.

Due in part to the size of the regulated community and other reasons discussed above in Section V the Agency has decided to propose a rule for Subtitle I tank systems following a strategy that calls for an upgrading of all UST systems to new tank standards within 10 years. As described below, today's proposed repair regulations require upgrading to meet the corrosion protection provisions for new tank systems. Additionally, as in the Subtitle C hazardous waste tank rules, today's proposal requires that the integrity of tank systems must be tested before the system can be returned to service.

EPA believes that technically viable tank repairs should be an option available to tank system owners and operators. The approach proposed today in § 280.33 allows a one-time repair of tank vessels, if it can be accomplished in a technically sound manner, but requires the replacement of leaking sections of pipe, pipe joints, and fittings (if tightening joints does not stop the leak). EPA decided to allow the tank repair process as a viable means of extending the useful life of an underground tank because many state and local regulations currently allow non-tight UST systems to be repaired, and acceptable industry recommended practices exist that, if followed, should extend the life of a tank appreciably and reliably. At present, EPA has no information to indicate that tank repairs conforming to API 1631 recommended practices are not effective or feasible.

On the other hand, repeated releases from the same tank are indicative of a fundamental problem in the tank system that most likely could not be rectified by continued repair. In addition, the repair of an already lined steel tank would require that the interior of the tank be sandblasted down to bare metal to allow the proper application of the new lining. This does not appear feasible and supports the proposed requirement that UST systems be repaired no more than one time.

The proposed approach also requires that some type of corrosion protection system must be replaced at the same time a steel tank is repaired/lined for failure due to corrosion. A tank that has failed due to corrosion will likely suffer additional corrosion following the repair/lining operation, unless this step is taken. According to API, bare steel tanks normally should be protected using an impressed current system, because this system can adjust voltage requirements for any tank-to-soil potential differential. Coated tanks may be protected using either the impressed current or sacrificial anode type of protection system provided that the coating is in reasonably good condition and still provides corrosion protection for the tank. Comment is specifically invited regarding this retrofit requirement for corrosion protection.

The proposed regulatory approach (in § 280.33(a)) for the repair of existing UST systems allows owners and operators to repair and line a tank to stop the tank from leaking or to extend the tank's useful life only if the person repairing the tank, or an independent registered professional engineer, will certify in writing that the repaired tank meets the following conditions:

- It passed the vacuum test with no adverse impact to the lining, determined by an internal inspection after the test;
- The liner material chosen is fully compatible with the contents to be stored in the tank;
- The tank has not been repaired or lined previously;
- A corrosion protection system is retrofitted if the tank being repaired is a steel tank that failed due to corrosion; and
- The tank was internally inspected and ultrasonically tested and determined to be structurally sound.

The use of the vacuum test proposed today (Section 280.33(d)) simulates a greater external pressure on the tank than would be found under normal operating conditions. A tank that is not properly relined (for example, if holes were not plugged or the surface improperly prepared) could not withstand the pressure of the test. Either the lining would not adhere or the tank could not hold the vacuum. A tank that is not structurally sound also would not hold the vacuum and could buckle.

EPA believes that immediate tank tightness tests are inappropriate for determining the success of repair procedures. Such tests cannot ascertain whether the lining material has properly bonded to the steel. In addition, tank tightness tests require tanks to be at least partially filled with product. EPA believes the owner and operator should know that the repaired system will hold product before introducing product into the system. Today's proposal (Section 280.33(f)) does require a tightness test within a year after the installation is completed. EPA believes that such a test is an important quality assurance test, if it is applied after the repaired tank has been subject to typical operating stresses for a sufficient period of time. A tightness test is unnecessary if the tank has interstitial monitoring or continuous to frequent monitoring because a repair failure will be quickly detected.

The owner and operator must replace all leaking pipes. The proposed regulations will not allow piping to be repaired (Section 280.33(e)). Leaking joints could first be tightened to see if this procedure corrects the leak. Joints and fittings that continue to leak after being tightened, or that are obviously damaged, must be replaced. The replacement piping must be installed in accordance with § 280.20, the performance standards for new UST systems.

5. Recordkeeping

a. Overview

Under the proposed regulations, recordkeeping is an important compliance tool for both owners and operators of UST systems and regulatory agencies. Records demonstrate that certain important past actions actually took place. When properly maintained, records can also serve to remind the owner and operator of regularly scheduled actions that must be performed in order to remain under warranty or within regulatory compliance. Finally, properly maintained records also allow later analysis of the tank systems by either the owner and operator or the regulatory agency.

Given the size of the regulated UST community, resources are not available that will allow a regulatory agency to physically inspect each major event as it occurs throughout the life of every underground tank system (for example, installation, release detection, repair, and closure). The availability of proper records, therefore, is the essential track record that allows the regulatory agency to gain rapid insight into the status of compliance at facilities when they are inspected.

b. Current Practices

Existing state and local regulations governing underground storage tanks address recordkeeping to some degree. Many of them have relatively comprehensive requirements. The most prevalent records required in state regulations involve notification, release detection, closure, operation and maintenance of corrosion protection systems, and tank system repair.
All existing programs that require release detection also require the maintenance of records for release detection. Daily recordkeeping of product inventory is usually required, including the amount of sales, deliveries, inventory on hand, measurements of water level in the tank, and reconciliation of any losses or gains. More than half of the programs examined require recordkeeping with other methods of release detection, including data derived from monitoring well samples, visual inspections, in-tank monitors, and interstitial space monitoring for double-walled UST systems.

Many of the regulations also address recordkeeping for tank closure. For example, temporarily out-of-service UST systems are normally subjected to the same recordkeeping requirements as operating tanks. Several regulations require documentation of temporary closure. Records of permanent tank abandonment or removal are also mandated. Usually, this includes record of the closed UST system's capacity, age, specific location at the site, as well as the date and method of closure. A few programs require recording of key closure information on the property deed as well as documentation concerning the disposal or reuse of permanently closed tanks.

Existing regulations often require maintenance of records for tests or checks of various system operations. Specifically, results of cathodic protection and leak detection system operational checks are to be recorded. In addition, records of the most recent tank and piping tightness test results must be maintained. Finally, results of maintenance service checks on corrosion protection, leak detection, and other system components are sometimes recorded.

Most state and local regulations require records of repair and/or substantial modification of tank systems. These records may include certifications from lining installers or repair contractors. In addition, certifications from the original tank manufacturer that a particular tank can be reused following repair are common. Normally, the state regulations specify a minimum period of time for which tank system records must be maintained. This period varies from 1 year up to 6 years, with the majority of existing regulations specifying 3 years.

c. Approaches to Regulation

The regulatory approach to recordkeeping pursued by EPA today follows directly from the technical standards set out in today's rule. Although EPA could require owners and operators to adhere to the technical standards proposed today with minimal recordkeeping requirements, this approach would result in numerous implementation problems, if not making it completely impossible to determine whether individual UST systems are in compliance with these standards. EPA is convinced that there are several recordkeeping requirements that are essential and will serve both the regulated community and the implementing agency's mutual interests in assuring proper UST system management. These records will prompt effective UST system management and will demonstrate to the regulatory agency that the owner and operator are managing each UST system in accordance with the technical standards. Accordingly, EPA believes that some recordkeeping is necessary in support of the technical standards for release detection, closure, operation and maintenance of corrosion protection systems, and UST system repair.

Today's proposed recordkeeping requirements are intended to impose the maximum burden on the regulated community while at the same time still ensuring that owners and operators can demonstrate (on a site visit by the implementing agency) proper management of their tank systems. These requirements were not developed to ensure that compliance can be demonstrated over the total operating life of the facility; records demonstrating such long-term operational compliance were deemed unnecessarily burdensome. Given the enormous size of this regulated community, today's proposed recordkeeping requirements are instead intended to demonstrate recent compliance status prior to the on-site inspection by the implementing agency. In proposing these minimum requirements, EPA recognizes that state and local governments may want to augment them with more recordkeeping requirements as specific local conditions dictate.

Today's proposed rule sets forth recordkeeping requirements for release detection, closure, operation and maintenance of corrosion protection systems, and tank system repair. The recordkeeping requirements for release detection and closure are discussed later in this Preamble, where the corresponding technical requirements are described. Following is a discussion of the specific recordkeeping requirements for repairs and operation and maintenance of corrosion protection, and the general requirement that records be properly maintained and made available upon request.

(1) Corrosion Protection Operation and Maintenance Records (Section 280.31(d)). To assure continuing compliance with the performance standards in proposed 280.31 concerning the maintenance of corrosion protection at steel UST systems, all owners and operators with cathodically protected UST systems must retain records of recent maintenance service checks performed by a corrosion expert as well as inspections of each impressed current system's running condition by the owner and operator. The recordkeeping requirements in this area reflect the operation and maintenance standards proposed in 280.31. Thus, for field-constructed cathodic protection methods using impressed current, the results of the last three bi-monthly inspections must be available. For field constructed methods using anodes, the results of the last two annual service readings must be kept. At UST systems using premanufactured (and applied at the factory) corrosion protection under the tank warranty, the last service check conducted under the tank warranty, but completed no longer than five years ago, must be kept. Each of these requirements for recordkeeping were developed to reflect the level of oversight EPA believes is necessary to ensure corrosion protection is operating continuously and being properly monitored. For example, under today's proposal, the premanufactured cathodic protection systems for tanks require less frequent service checks and correspondingly less recordkeeping to ensure compliance with the operation and maintenance requirement.

EPA expects that many corrosion protection systems will have at least annual service checks performed (and thus could have two service records under this proposed requirement) because cathodic protection for steel piping must be constructed in the field and is not available in a pre-manufactured form.

(2) Tank Repair Records (Section 280.33(g)). Also proposed today is a requirement that all owners and operators with repaired tanks retain a record that demonstrates the repair was properly conducted as required under 280.33. The certification of the repair required in 280.33(a) must be kept for as long as the tank is used for storage. Also, the results of the ultrasonic tank wall thickness test required by 280.33(b)(3) and the vacuum test required by 280.33(d) must also be retained for as long as the tank is used. These records are the minimum necessary to show
requirements with the 280.33
requirements.

No records of piping repairs are
required because faulty piping and
fittings cannot be repaired; they must be
replaced in accordance with the new
tank standards. Records concerning the
repair of tanks must be kept for as long
as the tank is used because it can only
be repaired once, and a record of repairs
will provide the owner and operator and
implementing agency with the
information that will ensure that more
than one repair is not made and has
been done properly.

(3) Maintenance and Availability of
Records (Section 280.34). Today's
proposal includes a provision that
requires all UST system owners and
operators to cooperate fully with the
implementing agency by making all
records immediately available regarding
inspections, monitoring and testing
results, and by complying with requests
document submission, testing and
monitoring. This requirement stems from
section 9005 of RCRA.

Also proposed is a provision that
requires all the records required as part
of the UST system standards be
maintained either on-site and be
available for immediate inspection, or at
a readily available alternative site and be
available for inspection upon 24
hours notice. This provision is intended to
avoid unnecessary delays in
determining compliance with today's
proposed requirements during
inspections. Most of the time, the
Agency anticipates that all required
records will be maintained on-site and
therefore must be immediately available
for inspection. However, the Agency
recognizes that the maintenance of
records on-site is not always possible at
all sites. Therefore, if such records are
stored off-site they must be available for
inspection within 24 hours after the
implementing agency provides notice to
the owner and operator. This notice may
be provided before an inspection takes
place to make sure the records are
available during the inspection.

(4) Issues for Public Comment. The
Agency requests comment on today's
proposed recordkeeping requirements.
EPA also requests comment on the need
for additional recordkeeping
requirements. One type of record that
the Agency considered requiring at all
new UST systems in today's proposal is
a site plan. This plan would show
locations of surrounding system
components and would be useful for
investigating suspected releases and for
checking compliance. Several states
require site plans. The Agency did
not include site plans for today's
proposed recordkeeping requirements
because of a number of issues noted
below.

Comment is requested on several of
the issues related to site plans. One of
these issues is what features should be
shown on the site plan. The Agency has
considered requiring the site plan to
show the locations of the tanks, piping,
monitoring wells and other underground
structures in the excavation area. A
second issue is the level of detail that
should be required. It has been reported
to EPA that most tank installations are
completed without engineering
drawings. However, the installer could
draw a schematic showing critical
dimensions before closing the
excavation. A third issue is whether the
site plan should be submitted as part of
the notification form or retained by the
owner or operator at the tank site. The
fourth site plan issue that EPA is
requesting comment on today is whether
the site plan should be retained for
the life of the facility or some shorter period
of time. EPA requests comments on
these specific issues and on the
adaptability of including site plans as a
part of the final recordkeeping
requirements.

D. Release Detection

1. General Strategy

a. Overview

As discussed in Section V of today's
Preamble, EPA has concluded that early
detection is necessary to minimize
contamination of soil, ground water, and
surface water from underground storage
tank system releases. Records from past
release incidents indicate that, without
the use of release detection, a release
can become substantial before it is
detected. In fact, the Summary of State
Reports on Releases from Underground
Storage Tanks notes that most release
incidents were first detected by people
seeing, tasting, or smelling the released
material in the environment. To
adequately protect human health and
the environment, releases need to be
detected well before they have become
easily noticed through the basic human
senses.

Several release detection methods are
now available that can be used to detect
releases before they have adverse
impacts on human health and the
environment. These methods range from
periodic precision tests for tank
tightness to continuous tank monitoring
instruments. They vary widely in
sophistication. Any method includes at
least one sensor, a design that assures
collection of data from any point in the
tank system, and a data analysis
capability to interpret results. (The
variety of technologies available is
described in detail in the sections
below.) EPA believes that widespread
implementation of release detection
methods will result in more effective
environmental protection. Several states and
local communities implementing
various approaches to release detection
for UST systems are already recording a
dramatic increase in the number of
releases being detected. EPA is today
proposing to allow several methods that,
properly used by UST owners and
operators, can quickly detect releases.

b. Current Practices

Release detection has been practiced as
a voluntary activity by UST owners and
operators only to a very limited
degree in this country. They have mainly
used the traditional methods of product
inventory control and tank tightness
testing. The Summary of State
Reports on Releases from Underground Storage
Tanks indicates that, for those incidents
reporting a release detection method,
about 20 percent of the releases were
discovered as a result of inventory
control and tank tightness testing. Most
of the others were detected through
inadvertent human observation (sight,
smell or taste).

As a result of the limited use of
release detection at existing UST
systems, there is very little information
concerning how to conduct release
detection. Unlike many of the other
aspects of proper UST management,
recommended industry practices and
consensus codes are not yet well
established. Thus, a significant factor
that has been recognized by EPA during
the development of today's proposed
approach towards release detection is
the lack of industry consensus codes,
recommended practices and guidances,
and experience with release detection at
UST systems.

The National Fire Protection
Association's (NFPA) publication,
"Recommended Practices No. 329:
Underground Leakage of Flammable and
Combustible Liquids, 1985," is one of the
few documents presently available for
use by UST owners and operators and
state and local regulatory agencies as a
source of guidance for appropriate
release detection methods. NFPA 329
gives recommended procedures for the
investigation, confirmation, abatement,
and remediation of unplanned
uncontrolled releases of petroleum products.

The most widely recognized
information from NFPA 329 concerns its
performance standard for a "precision
test" (i.e., tightness test) that may be
used to determine whether a tank is
leaking. It defines a precision test as
"any test that takes into consideration
the temperature coefficient of expansion of the product being tested and is capable of detecting a loss of 0.05 gallons per hour. The recommendation that tank tightness testing be capable of detecting leaks as small as 0.05 gallons per hour was established over 40 years ago. It was based on performance standards that were considered adequate. The number of wells required by state and local programs, if no secondary containment is provided, ranges from two to six per UST site.

Also, various techniques exist for release detection within the walls of a double-walled tank. Manual (or continuous automatic) devices can be used to detect the presence of liquids or vapors, or changes in pressure or the level of liquids within the interstitial space between the walls.

EPA has identified the use of NFPA 329, which requires tank tightness testing to be capable of detecting leaks as small as 0.05 gallons per hour, as the performance standard that would apply to all methods. The standard would require a detectable quantity (e.g., an amount leaked or a leak rate), a frequency of testing, a probability of detection, a probability of false alarm, and a probability of compliance.

Releases may be detected either by continuous or intermittent automatic sensors placed in the walls or by periodic manual sampling and analysis. Monitoring wells may be placed in the excavation area around the tank or within secondary containment. Generally, if secondary containment is used, a single monitoring well placed in a collection sump is considered adequate. The number of wells required by state and local programs, if no secondary containment is provided, ranges from two to six per UST site.

A rapid increase in the development and implementation of new release detection technologies related to UST systems has resulted in the development of new technologies and the availability of new technologies. These new technologies include the use of sophisticated electronics, which has also resulted in the formation of several new companies offering new release detection technologies related to UST systems. For example, the American Petroleum Institute has recently published guidelines concerning the use of monitoring well techniques and automated in-tank monitoring methods. Development of new release detection technologies, often relying on sophisticated electronics, has also resulted in the development of new release detection technologies, often relying on sophisticated electronics, has also resulted in the development of new release detection technologies.
and a relationship of the detection limit to tank size. This approach would allow maximum flexibility (and responsibility) to industry to choose the reliable methods of release detection. EPA would provide technical guidance on designing, selecting, installing, and operating release detection;

- Certification of Methods. EPA would allow only release detection methods that have been approved by EPA. Approved methods would have to be backed up by specific procedures for installing, operating, and maintaining them, as well as by requirements for quality assurance/quality control and installer or operator qualifications. EPA would establish some measure of performance upon which to approve methods; or

- Method-Specific Performance/Requirements. EPA would establish requirements concerning the use of individual classes of methods of release detection and their performance. The underlying performance of the different methods could vary depending on the effectiveness and reliability inherent in each method.

Each of the above approaches requires that EPA establish acceptable performance standards for release detection. There are two ways to establish such standards of performance. The first is to specify a standard based on a predetermined size of release or release rate that is expected to pose a threat to human health and the environment. Once this unacceptable level of release is established, setting performance standards for release detection is somewhat simplified. Unfortunately, this approach towards standard-setting does not appear to be possible at this time because: (1) Determining the size or rate of an unacceptable UST release should be site-specific; and (2) the Agency's present level of knowledge as to the rates, sizes, and the development of typical releases from UST systems is insufficient to know whether a particular standard of performance would result in most releases being detected before they posed a threat to human health and the environment. The second approach towards specifying performance standards is to base them on the technological limits of release detection and require them to take place at a minimum within these limits of current technology. The release detection standards specified in today's proposal are based on this second approach to standard-setting. The Agency selected this approach recognizing that the performance limits of various methods of release detection are not equally understood.

Because some methods of release detection (such as in-tank volumetric release detection systems) are presently better understood than others, EPA considered setting minimum standards based on the performance of the better-known devices. However, today's proposal rejects this approach in order to avoid prematurely excluding the use of many other potentially viable—but less understood—methods. For example, some out-of-tank release detection methods offer significant potential for detecting even small releases, are in common use, and are an integral part of many local and state programs. While the precision of some of the sensors used in these methods are well known, the impact of environmental sources of interference that limit accuracy is not yet well known.

The standards being proposed today for each method of release detection are based on EPA's current limited understanding of the present technologies. Preliminary evidence from EPA's research program suggests that some of these technologies may become more refined and reliable in the future. Therefore, while the Agency wants to set a standard that would challenge present technologies, there is also a practical need to develop a rule that does not go too far beyond the reach of current practices. The available data suggests that there already is a significant number of leaking UST systems. Thus, EPA believes a program of regular release detection—even at a minimum performance level that is not as good as may ultimately be possible—will significantly reduce threats to human health and the environment. With this in mind, EPA is setting different requirements for different classes of release detection methods. The discovery of releases identified simply through the initiation of this release detection program is expected to provide significant benefits nationwide.

If EPA were to set a general performance standard for all methods, such a standard should require that the performance of the release detection method, along with the frequency of the testing, be specified. The standard should include:

- An amount released or release rate;
- Probability of detection;
- Probability of false alarm; and
- Frequency of test.

This four-parameter specification defines the limits of the threat to the environment and the confidence with which these limits can be met. For example, if the detection limit is expressed as a release rate, the relationship of the detection limit to tank size, should also be stated. Selection of this approach, along with the specific values for each parameter, requires the knowledge that each general class of detection can be understood in terms of these parameters and can perform up to or better than each value set by EPA. EPA does not believe that the data required to specify such a comprehensive standard is sufficiently complete for most methods of release detection and is concerned that such an approach may preclude the use of many methods of detection that will not be understood in this way for the foreseeable future.

Today, EPA is proposing a method-specific performance requirement approach to release detection. For certain classes of methods, EPA is proposing specific standards for the four parameters described above. For other classes of methods, EPA determined that it had insufficient information to specify such standards. The following discussion provides details of the alternatives considered and the rationale for selecting the proposed approach.

Approach 1—General Performance Standard. Using this approach, EPA would require release detection at all UST systems and would establish the same release detection performance requirement for each method, but would not specify the particular methods that are acceptable or unacceptable. The general performance standard would specify a complete four parameter performance standard (i.e., the amount of release within a specified period of time that must be detectable by any method used with specified probabilities of success and failure). The choice of appropriate technology would be left in the hands of state and local regulators, the regulated community, and the vendors of release detection methods. EPA would periodically report on the results of numerous ongoing research efforts and provide guidance that would assist state, local, and industry officials in implementing the release detection requirement. As technology and the knowledge of performance capability evolves, the Agency could revise the general performance standard to reflect the then current state of the release detection art.

This approach has several advantages. First, all methods would adhere to the same standard and would be required to equally protect human health and the environment, and the relative performance of all the methods could be directly compared when
enough information is developed to allow it. Second, by simply specifying a general performance standard, this approach provides the greatest flexibility to UST owners in selecting and implementing their preferred method. Third, the Agency could develop such a rule fairly quickly and it could challenge the vendors of the different methods to develop more performance-oriented test data to show they could meet the general standards. This approach has some disadvantages. Selection of a general performance standard may preclude the use of promising types of release detection (an outcome that EPA cannot predict and does not deny). This approach also requires that the capability of release detection technology, and the impact of an uncontrolled release be known. Any standard defined today would have to be based primarily on the current performance of volumetric tank tightness tests because they are the best understood of the methods currently available. It is also uncertain under this approach how the performance of other methods could be compared to such a standard. Further, as knowledge of all the methods increases, future revision to a general performance standard developed based on today's limited data could result in some confusion and implementation difficulties in the regulated community and the states (who have to revise their programs and reassess methods of detection to keep up with these changes).

A major problem in specifying a single release detection rule is that a "typical" quantity of product released at the tank is not easily related to the quantity-of-material measured by some methods of release detection especially out of tank leak detection methods. A detectable quantity, may be expressed as a release volume rate (most easily defined for in-tank release detection systems) or as a concentration of soil contamination in ppm (most easily defined for external release detection systems). A single performance standard would require that the relationship between the release rate and concentration of soil contamination be quantified. In-tank measurements provide the most direct measure of a leak and can, in principle, identify a leak before any significant product is released into the environment (provided the test is conducted frequently and release exceeds the threshold of the test). The product level measurements can be quantified in terms of flow rate, and the performance of the release detection systems is reasonably well known. In practice, tank tightness tests are not performed as frequently as desired because of their impact on dispensing operations and cost. The automatic product level methods can be applied more frequently than tightness tests and thus could at least partially alleviate this problem. Data available to EPA on these methods, however, suggest that they may be less sensitive than some methods of tank tightness testing. Out-of-tank methods can be operated continuously or frequently without affecting dispensing operations, but it may be necessary to calibrate monitors at each site to interpret a measurement as a rate of leakage. A further difficulty is that the performance of these out-of-tank monitors is not well known, and regulated substances may be released in significant quantities in the environment before a release is detected.

Under this approach, EPA would specify a four-parameter performance standard applicable to all classes of release detection methods. The standard considered by EPA for this purpose is the one specified today for tightness test devices; this standard was considered because: (1) The capability of tank tightness testing is the best known; and (2) this standard would challenge vendors to improve their knowledge of the capabilities of these and other classes of methods. EPA lacks sufficient data, however, to ascertain that the in-tank parameters are achievable by all other classes of methods. Moreover, EPA's research necessary to establish the technological limits of performance for each class and an evaluation of these systems will not be complete before final rules are written.

Alternatively, EPA could eliminate those methods of release detection for which information is incomplete in the proposal, but did not, because it wants to maximize the number and variety of detection systems available for use. If EPA selected this approach, each manufacturer of a release detection method would eventually specify the precision and accuracy of its methods in terms of the four-parameter test description. This performance data is needed for owners and operators to make environmentally protective and cost-effective choices. Of particular concern to EPA is how the performance of non-volumetric methods can be measured against the volumetric four-parameter standard described in today's proposal for tank tightness testing. Requiring all methods to meet this standard could necessitate on-site calibration each time such a method (e.g., soil gas or groundwater monitoring) is used.

Approach 2—Certification of Methods. Under this approach, EPA would establish criteria and procedures for judging and certifying the various commercially available methods and devices. EPA could review and evaluate methods through these established procedures as well as foster and accept the results of such reviews by independent professional associations capable of doing such certifications (e.g., Underwriters Laboratories or the American Society of Mechanical Engineers). Under this approach, the manufacturers of the various methods could conduct the necessary performance evaluation reviews and submit these results for consideration to EPA or an independent review organization.

Under this approach, a release detection method could not be used until approved by EPA. Thus, unacceptable or questionable methods would not be allowed until demonstrated to be accurate and reliable. This approach provides the clearest direction possible to the tank owner and operator about methods that can be used so that implementation by the regulators would be simple and straightforward.

There are several disadvantages to this approach. The most significant disadvantage is that it would be difficult to implement a certification program rapidly. Such a continuing, affirmative federal regulatory presence would also run counter to the approach being taken to bolster and encourage the lead of state and local programs in all aspects of the program. It would undoubtedly result in significant changes to regulations currently in place at the state and local levels. Based on the experiences of similar approaches taken under other EPA programs, it could take up to two or three years beyond final rule promulgation to begin actually approving devices, thereby delaying implementation of these release detection programs. These delays in program implementation would enable numerous releases to erupt undetected over the next several years with potentially significant adverse consequences to human health and the environment. This approach also would pose significant implementation problems; for example, decisions would have to be made as to which of these devices to review first. The first approved devices would have significant marketing advantages over methods yet to be reviewed.

Approach 3—Method-Specific Performance Requirements. Under the
approach which is proposed today, EPA would establish specific performance standards and a minimum frequency of test for each class of release detection methods. A different performance standard could be specified for each method and performance standards for some classes of methods would not contain all of the parameters discussed under approach 1. Restrictions governing the frequency of each method's use and siting would be specified. The type of performance standards for each general method would depend on the principle of its operation. For example, one criterion for volumetric tank tightness testing would be a minimum release rate, while for soil vapor monitors a minimum detectable concentration may be more suitable.

The development of performance standards would be primarily based on data provided by manufacturers and the results of EPA research as well as that of other groups.

This approach is very similar to the first approach but provides performance standards for each specific method rather than establishing one performance standard for all methods. The primary advantage of this approach is that it would set separate standards for each class of release detection methods. These standards could be based on data available to EPA at this time. Also, this approach would allow industry and the states to have significant flexibility about the choice of individual methods that can meet the minimum performance standards. Because certain limitations of use will be necessary to meet this required performance, not all methods could be used in all situations; this would reduce misapplication and incorrect installation of methods.

The primary disadvantage of this approach is that standards of release detection performance will be nonuniform. The standard for one release detection system may be more or less stringent than other systems. Further, individual owners and operators may have more difficulty than under approach 1 in achieving a desired degree of protection. Another disadvantage is that future EPA revisions of specific performance standards to reflect new data could result in confusion and implementation difficulties in the regulated community and the states.

Under this approach, a four-parameter performance standard can be specified today for tightness test devices, but not for other methods. The parameters selected are believed to be achievable by most in-tank release detection systems that are in current use; although some small modification to current operation might be required. The research necessary to establish the technological limits of performance and an evaluation of these systems will be complete before final rules are written. EPA encourages the developers of release detection systems to strive to detect the smallest leaks possible because the standard may become more stringent with time. The data are available to evaluate inventory reconciliation and EPA may develop a four-parameter specification for this method before promulgating final rules. EPA believes that the data are generally insufficient to specify a four-parameter standard for out-of-tank release detection methods at this time. EPA is conducting research on the performance of these devices but does not expect the results of this research to be available before the rules are finalized.

Nevertheless, EPA did not eliminate these methods of release detection in the proposal because it wants to maximize the number and variety of detection systems available for use. Out-of-tank methods have detection potential equivalent to or better than the in-tank methods.

In addition, the out-of-tank release detection methods do not generally measure the rate of leakage; they detect the presence of leaked material. Therefore, an on-site calibration may be required if a four-parameter specification, which is volumetric in nature, is chosen.

EPA expects, under this approach, that manufacturers of a release detection method will eventually specify the precision and accuracy of its method in terms of the four-parameter description. Manufacturers or providers of release detection services will be in the position to furnish the performance data for their method that supports their claims. This information will give each owner and operator information for making cost-effective choices. EPA recognizes that any method of unknown performance has the potential for a significant level of false alarms and missed detections.

Today's proposal was developed to establish release detection standards using this third approach. Although preferable in several ways, EPA rejected the first approach at this time because the Agency did not feel that there were sufficient data to assure that all release detection systems meet a single standard. The Agency was concerned that the first approach (a general performance standard) could, at present, be based primarily on the performance of volumetric test methods, yet would apply to all methods. The second approach (certification of methods) was rejected because of the time delays that would be required for formal certification of adequate release detection. This would reverse the trends towards rapid implementation of release detection that are presently being fostered by numerous state and local programs. The third approach (method-specific performance requirements) is being proposed because the Agency believes that enough information is already available, and will be developed before the promulgation of final rules, to enable the establishment of standards that can in many ways limit possible confusion and abuses that might otherwise occur under the more general approach. This method specific performance standard approach would also avoid the delays associated with trying to certify and approve the various alternatives at the national level. It would still allow states and local governments to continue to take their different paths towards release detection as long as the underlying requirements for the methods are observed. Finally, this approach provides flexibility and choice to the regulated community, and also attempts to foster and limit their search to acceptable uses of allowed methods.

EPA recognizes that the third approach is a subset of the first approach. The Agency believes that, ultimately, a single performance standard that can be met by all classes of methods may be possible. However, this was not possible by time of this proposal and must wait until the Agency has a better understanding of the behavior of UST releases and the performance of various methods of release detection. Although EPA is not planning to undertake certification of different methods of release detection, research has already begun, and more studies are planned, that will more conclusively reveal the dependability of, as well as the effect of factors controlling the performance of many different release detection methods. Should EPA decide to finalize the requirements for release detection proposed today, the results of much of this work may be provided in the form of guidances that should prove very helpful to state and local communities and to the regulated community in assessing which methods work best under different conditions. EPA will consider, however, selecting the first approach in the final rule, if sufficient data can be developed from ongoing research and public comment.
EPA has set up a testing apparatus in its Edison, New Jersey laboratory that has already begun to assess the performance of the different in-tank monitors under carefully controlled test conditions. The results of these investigations will be made available to both the owners of these commercially available devices, as well as to the public.

In our Las Vegas laboratory, we have begun an evaluation of out-of-tank monitoring methods of release detection and expect those efforts to provide significant additional information concerning monitoring for liquids or vapors in and immediately beneath the UST excavation area. Awareness of the potential need for external release detection should foster rapid development of new technologies and products for release detection. Because the external release detection industry has a relatively limited history, it has few reference standards and no consistent criteria for evaluating these devices. EPA has chosen to use a series of standard laboratory benchtop test methods and specifications to evaluate important operational parameters such as detectable quantities, specificity, response time, accuracy, and precision. Based on these and other data, EPA could determine the capabilities of each of the release detection devices for each of the four parameters in a general performance standard. EPA will report findings of this research as it is completed. Guidance documents may also result from these efforts.

Public Comments. EPA requests public comment concerning the feasibility of the three general approaches towards release detection standard-setting discussed above. Specific issues are comments and information concerning:

- The appropriateness of the approach selected;
- The need for uniform performance standards applicable to all classes of release detection methods;
- The validity of the specific values of the four parameters proposed for tank tightness testing if these values were applied in a general performance standard to all classes of release detection methods;
- The appropriateness of specific values proposed for the performance standards required of each class of method;
- The need for a more complete performance standard with respect to certain methods; and
- The concept of making the performance standards more stringent as future research reveals how this can be accomplished.

EPA is particularly interested in research results and release detection performance data which permit the choice of a single four parameter general performance standard applicable to all categories of release detection methods or a better method-specific standard for each category of release detection methods. This information is important given the present state of knowledge about, and the rapid development of, the various release detection technologies.

The relationship between concentrations measured at an external leak detection monitoring point and a leak rate measured within the tank is difficult to develop. Mathematical models or the release of a tracer at a tank and measured by the external monitoring system may be used to estimate the performance of the external leak detection method. The Agency cannot provide at this time further guidance on the development of this relationship. Consequently, comparisons of the performance of tank tightness tests, inventory reconciliation techniques, pipe-line monitoring systems and external leak detection systems are difficult at best. The Agency seeks to develop a common performance standard for all leak detection monitoring techniques. Comments are solicited on how this may be done.

2. General Requirements for All UST Systems (Section 280.40)

Today, EPA is proposing to require release detection for all UST systems. In the following sections of the Preamble, the numeros methods and the performance requirements conditioning their use are discussed in detail. However, no matter which release detection method is chosen by an owner or operator, the Agency believes there are some requirements that must be adhered to at all UST systems to ensure that an adequate and reliable level of release detection is provided. Those general requirements proposed for release detection at all UST systems are briefly discussed below.

a. Capable of Detecting a Release From Any Portion of the UST System (Section 280.40(a)(1))

No matter which method of release detection is used by the UST owner and operator, it must be able to detect a release from all the components of the UST system. For example, release detection must be able to detect releases not only from the tanks, but from the underground piping and equipment. As discussed earlier in Section IV of this Preamble, releases from piping are an important source of the reported releases from UST systems and the definition of UST in Section 9001 includes underground piping connected to the tank. Thus, EPA has proposed in 280.40(a)(1) a general requirement that UST owners and operators use a release detection method that includes consideration of all the UST components. A test of the piping and another test of the tanks separately is one such alternative. If wells, barriers, or secondary containment are used, they must address all the UST system. A combination of more than one method can be used as long as each UST system component is monitored by one of the methods.

An associated concern with the question of the capability of detecting releases is the reliability or dependability of the method used. Even if it does address all the UST system components, it could fail to work and not detect a release. Under today's proposal, each UST system would be required to be monitored by only one method of release detection. Because no one method works perfectly, this will result in some releases not being detected. EPA considered requiring the use of more than one method at each site, and thereby providing a redundancy to the release detection that would provide more assurance that, if a release escaped one failed method of monitoring, it would be picked up by the other method before adverse impacts to human health and the environment could occur. This principle is a feature of the California UST program's approach towards release detection of existing UST systems.

The Agency rejected requiring the use of redundant methods of release detection for several reasons. First, as stated previously, most UST systems presently do not have any release detection, and the more widespread use of at least one method for each site is expected to reduce risks markedly, even if these methods do not work perfectly at all sites. The Agency's new UST system requirements and upgrading requirements for all UST systems (discussed later in this Preamble) are expected to dramatically reduce the number of releases that do occur over time, and the potential adverse impacts associated with any imperfections in particular release detection methods thereby will be diminished. Second, today EPA is proposing to allow the use of different methods of release detection, but only following several requirements that must be met to ensure that they are properly used. These performance requirements are intended to make the detection of releases using a single method much more certain. Third,
it is not clear that if redundant methods are used they will pick up the types of releases that might be missed by the first method. For example, a vapor monitoring method could miss the detection of very small releases. However, the added use of various in-tank tightness tests might miss them also if the releases were very small and below the detection thresholds for this method of detection. Finally, with the exception of requiring inventory controls, most existing state and local UST programs do not require redundant monitoring programs at UST sites.

In summary, the Agency was not convinced that the use of duplicative monitoring methods at each UST system would gain significant environmental benefits, in comparison to the possible adverse impacts on program implementation. The Agency specifically seeks comment concerning the proposed approach to require only one method of release detection at each UST system. For example, would a requirement that all environmental monitoring methods be coupled with an infrequent tightness testing program provide significant additional protection to human health and the environment that would justify such an approach?

b. Installation, Calibration, Operation, and Maintenance of Release Detection (Section 280.40(a)(2))

In order for any release detection method to reliably detect releases, it must be installed, calibrated, operated, and maintained properly. EPA believes that any system designed to detect releases within or outside of the UST system must account for various factors and variables, some of which may be unique to the method. Improper installation of any method could undermine its designed effectiveness. Improper operation of the monitoring method could also result in faulty measurements or equipment failure. Much of the equipment being developed for UST release detection has electronic or mechanical components that require periodic calibration and maintenance on schedules specific to the monitoring technique and equipment. EPA believes that the suppliers of these release detection devices are in the best position to understand how they work and to specify proper installation and operation, as well as when and what routine maintenance and service checks for calibration, operability, and running conditions are necessary. Thus, today EPA is proposing in 280.40(a)(2) to require that all release detection equipment and methods be installed, calibrated, operated, and maintained in accordance with the manufacturer's instructions. An UST owner or operator who purchases and installs a monitoring device must adhere to what is considered good practice for that monitoring approach and equipment. For example, neglect of a system's maintenance so that it is out of operation or in need of recalibration would be a violation of this requirement. A written record of all calibration, maintenance and repair work will be required. This record should at least include the date and nature of work performed.

Because UST release detection is such a new and burgeoning field of technology, the Agency has identified several possible concerns that may be associated with a manufacturer's instructions for the proper installations, calibration, operation, and maintenance of various monitoring methods. With the wide variety of devices that are now available, many techniques are obviously new or in the experimental stage. Also, some of the methods require significant training to install and may require (under the requirements proposed today) some assessment of the site-specific conditions of the UST system. The manufacturer's representative may not be particularly well suited to acknowledge unusual location-specific variables that may preclude the use of the method at that particular site.

One approach to alleviating some of these concerns would be to require that all release detection methods applied externally to the UST system be installed and maintained by someone certified to do such work. A major drawback to this approach is that there do not appear to be any certification programs available or under development. The manufacturers of the various release detection methods do supply some expertise through different levels of training (some more rigorous than others). The Agency presently believes that, while the certification of release detection equipment installers is not presently required, the expertise of these manufacturers and installers will continue to improve rapidly as release detection becomes a more widespread practice. The Agency requests information and comment on the necessity for more than what is being proposed today concerning reliance on the manufacturer's instructions. Specifically, should special skills, judgment, and training be required of installers and operators of the various types of release detection methods so that the performance requirements for the methods being proposed today are met? Should certification of installation be required? Information also is solicited concerning experiences with the operation, use, and maintenance of various methods of release detection.

c. Performance Requirements and Records of Performance Claims (Section 280.40(a)(3))

The confident detection of small releases from UST systems represents a considerable technical challenge and is often, by its nature, a statistical process. The uncertainty in release detection is a consequence of a number of variables including environmental factors, operational practice, and instrumentation accuracy. Testing errors are manifested in one of two ways: (1) Missed detections of actual releases; and (2) false alarms that result in unnecessary release investigations and tank system repairs or replacements.

The detection of a small release is somewhat like trying to find a "needle in a haystack" (or a signal among various sources of noise). For release detection, the "needle" (or signal) is represented by the correct identification of the existence of a release and the "haystack" (or noise) is the sum of the interferences that may hinder or prevent the correct identification of the signal. Based on an analysis of the causes of fluctuations in testing measurements, the performance of different methods of release detection could be specified in terms of the probability of detection (PD) and the probability of false alarm (PFA) for a given leak rate (L). To develop this specification, it would be necessary to develop a history of measurement fluctuations for each method as determined for a range of test conditions. The actual state of the UST system being tested (e.g., whether, and at what rate, it is leaking) would also need to be understood to develop the performance claim. Classes of methods of release detection are not necessarily unhindered by similar sources of measurement noise. As a consequence, additional testing by an alternative release detection method should improve the confidence of release detection results.

EPA believes that widespread disclosure of release detection information will afford the UST owner or operator the means for making cost-effective decisions in the selection and implementation of release detection technology. Elements of information that are of particular interest to the owner or operator relate to the performance and operation of the release detection...
method. As a consequence, EPA proposes to require UST owners and operators to request, obtain, and keep on file the information relevant to their release detection technology of his choice. The information obtained from the manufacturer should include statements that address each of the following:

- Detectable leak rate, including PD and PFA;
- Test data that support performance claims;
- Equipment operation;
- Equipment calibration
- requirements; and
- Equipment maintenance requirements.

EPA seeks public comment on this requirement for this information collection and its storage.

d. Release Detection Frequency (Section 280.40(a)(4))

As discussed in more detail in Section V.C. of today's Preamble, in developing today's proposed regulatory strategy, EPA decided to propose the use of "frequent to continuous" monitoring or sampling of release detection as necessary to protect human health and the environment at both new and existing petroleum UST systems. To carry out this portion of the strategy, EPA is proposing a general requirement in § 280.40(a)(4) that all UST systems (both new and existing) be sampled, monitored or otherwise tested for releases at least once every 30 days. All the release detection methods allowed today (and discussed later in this Preamble) would have to be applied at least once every 30 days under this general requirement.

There are two important exceptions to this general requirement. The first exception allows infrequent use of tank tightness testing at existing UST systems for 10 years, if manual (or automated) inventory reconciliation is performed both weekly and monthly. The second exception allows the use of tank tightness testing at new or upgraded UST systems if the tests are conducted at least once every six months along with inventory reconciliation at least monthly. (These exceptions to this general 30-day rule being proposed today, and the reasons for them, are discussed in more detail later in this Preamble.)

In considering the frequency of release detection needed, the Agency examined four different time periods for release detection monitoring: continuously, monthly, quarterly, and semi-annually. As was discussed earlier, given the uncertainty associated with the methods of release detection proposed today, EPA believes that one way to ensure more reliable results is to apply them frequently. Frequent monitoring will provide numerous measurements during the year that can be evaluated to determine trends (if any) as well as to reveal potential problems and malfunctions of the release detection equipment (or practices used).

Other than tank tightness testing, which is generally done infrequently, there do not appear to be any established preferences concerning how often release detection should be carried out, based on a review of the most aggressive state and local UST programs. For example, California opted for a weekly detection sampling under several alternatives allowed for existing UST systems. Florida requires a monthly frequency as a minimum for both new and existing tanks. Several other states appear to emphasize continuous monitoring when environmental monitoring methods are used. No one appears to use a semi-annual frequency for release detection.

EPA's Regulatory Impact Analysis (see Section IX for more details) provided in support of today's proposal does not show distinguishable differences between applying the variously modeled monitoring methods at different frequencies at new UST systems protected from corrosion. With existing UST systems there are some differences modeled between methods used frequently versus infrequently. However, the biggest improvement still appears to come from simply applying release detection in the first place no matter quickly it is reapplied. In general, EPA believes that the more frequently release detection is used, the more reliable release detection results will be, and the less likely releases will go undetected and present risks to human health and the environment.

EPA decided not to propose continuous release detection at all USTs for several reasons. Continuous monitoring is not currently retrofitted to existing UST systems. Also, as described earlier, the continuous monitoring technologies for either outside- or inside-the-tank applications are not yet in widespread use. The Agency is concerned that forcing the use of such technology may be premature until the methods are more proven and available to the regulated community. The Agency also believes that there are many methods of detection available that appear to offer significant promise for release detection purposes, including several manual methods. A continuous monitoring requirement would prohibit this type of release detection. On balance, the Agency has decided the best approach is to allow as much flexibility to owners and operators as is possible while remaining protective of human health and the environment.

Most existing UST systems do not yet have release detection and it will take a tremendous effort nationally to have release detection applied at all of them within the timeframes mandated by today's proposal.

EPA decided for several reasons to propose that manual methods, if chosen by the owner or operator, must be used at least once every 30 days, as opposed to every 90 or 180 days. First, as previously explained, the more frequently release detection is correctly applied, the more applied it is provided for early detection. Release detection applied at least once every 30 days should more adequately minimize the threat to human health and the environment. Second, a significant benefit can result from requiring at least 12 measurements per year by fostering trend analysis, comparability of results, and assuring that the method being used is providing reliable and meaningful results. The 30-day minimum frequency does not appear to conflict with most established state and local UST programs, and should not present an intolerable burden to owners and operators. The proposed approach allows the use of manual methods at a frequency that is believed workable for the regulated community. The additional flexibility provided by the manual methods allowed by the proposed 30-day monitoring requirement gives the regulated community more choice, which is intended to foster more rapid implementation.

EPA requests information and comment on the selection of a 30-day minimum monitoring frequency for all release detection methods, except tank tightness testing. (The frequency allowed for tightness testing coupled with inventory monitoring is discussed in Section VII.D.3.a. of this Preamble.)

e. Site Assessment for External Release Detection Methods (Section 280.40(b))

The performance standards for external release detection methods can only be partially defined because the necessary data does not yet exist to specify the smallest release that can be detected with a high probability of detection and a low probability of false alarm. Today's rule only specifies the release to be detected with the external methods and mandates several performance requirements on how and where different methods can be used (for example, they are required to be
used within or immediately below the UST system excavation area). Because all external release detection methods cannot be used at every site, EPA is proposing that an assessment be conducted to ensure these method-specific requirements can be met and the appropriate external monitoring method is chosen.

Any one of several factors could be present in a particular setting surrounding an UST system that might adversely impact the performance of any external release detection method. Therefore, users of external release detection methods must gather basic information about the status of nearby site conditions to determine the method of external monitoring selected is appropriate for the site and is designed and installed properly. Today's proposal includes a general requirement in § 280.40(b) for UST owners and operators who may choose an external release detection method to conduct a site assessment. Any external release detection method whose application is determined to be inhibited by some site characteristic may be precluded from use at that site. Without certain basic information, which can only be obtained through a site assessment, the owner or operator could fail to identify factors that may inhibit the functioning of the release detection method. Thus, today's proposal requires that the assessment be sufficient to ensure the specific performance requirements proposed for the particular methods of external detection in § 280.41 are complied with.

EPA believes that using external release detection properly requires basic information about the subsurface within and immediately below the excavation area. Probably no external release detection method can be used at an existing site in a very shallow water table where significant levels of product have already been released. (Of course, corrective action may already be necessary at such site.) Similarly, the selection of a particular method will be influenced by such site information. For example, as discussed in more detail later in this Preamble, today's proposal precludes the use of ground-water table monitoring at locations where the depth to ground water exceeds 20 feet, or the use of vapor monitoring where background concentrations of total hydrocarbons in the excavation area exceed 500 ppm. Therefore, the site assessment requirement proposed today is intended to provide the basic information that is needed to: (1) Help the owner and operator determine whether the use of external release detection is appropriate for the site, (2) help the owner and operator select an external release detection system appropriate for site conditions, (3) aid in designing a network of sensors and wells which will give the greatest likelihood of detecting a release from any part of the UST system, and (4) indicate the potential for possible problems in interpreting data from the release detection system.

Of particular importance in a site assessment are potential sources of product and vapors, such as previous contamination from earlier releases and leaking UST systems at neighboring locations. Also, the site assessment must consider natural and man-made factors in or below the excavation area which will influence the movement of product and vapors (such as product type, water table depth, soil moisture, soil characteristics, excavation zone design, and subsurface utilities intersecting the excavation). EPA has identified several types of information which might be significant during a site assessment:

**UST SYSTEM CHARACTERISTICS**

Existing UST System or New Installation

- (the excavation zone of new installations can be designed to enhance external release detection; existing sites are not able to be redesigned)
- Existing Contamination

- (creates background levels in the excavation area against which new releases must be detected)
- Tank Size and Number

- (a factor in determining how many sensors and wells are needed and where they should be located)
- UST System Age and Construction

- (a possible indicator of excavation zone design and backfill characteristics)
- Presence of Overfill Prevention Controls or Containment

- (a factor in sensor and well placement as well as sensor data interpretation)
- Product Type

- (different products have different properties such as viscosity, density, and volatility which will influence sensor selection and product and vapor mobility)
- Layout of Tanks, Pipes, and Connections

- (may influence sensor and well placement)
- Adjacent UST Systems

- (potential interfering or confounding sources; may influence sensor and well placement, as well as sensor data interpretation)
- MAN-MADE SITE CHARACTERISTICS

- Excavation Zone Design

- Impermeable Liner

- (possible aid to sensor and well placement in well-designed installations)
- Backfill Porosity and Permeability

- (influences product and vapor mobility)
- Interfering Sources

- (possible cause of false positives; must be discriminated against in data interpretation; may influence well and sensor placement)
- Adjacent Sources

- Surface Spills
- Spurious Pathways

- (man-made pathways from within or beneath the excavation area can influence product and vapor movement; must be taken into account in sensor and well placement)
- Sewers
- Underground Utilities
- Pipes
- Basements
- Wells
- Obstacles to Measurement

- Electrical utility conduits in the excavation area
- Pavement over the excavation area
- Buildings adjacent to or in the excavation area
- Transient or steady-state releases

- (transient or intermittent releases such as spills may obscure continuous releases such as tank and piping leaks)

**SITE HYDROGEOLOGY**

- (important factors in selecting external release detection systems likely to determine product and vapor movement within the excavation area, sensor and well placement, data interpretation procedures)
- Vertical Structure
- Soil Composition
- Permeability and Porosity
- Depth to Water (with seasonal variations)
- Rainfall
- The levels and variations in "background" concentrations of product within or beneath the UST excavation area are particularly important to the success of external release detection monitoring. In general, small releases are expected to be detected more
readily at relatively clean sites than slowly developing releases at heavily contaminated sites. The amount of contamination in the excavation area will depend on whether releases from the UST system have already occurred at a site, on the care used in the past to prevent spillage from tank filling operations, and on the location of the UST system with respect to such past and present sources of petroleum and hazardous substance contamination. Site assessments for existing UST systems are likely to be more complicated and difficult than assessments at new sites because of past operational practices that resulted in product releases; such existing contamination can obscure future efforts with external release detection. EPA considers evaluation of the magnitude and extent of the existing contamination at both new and existing sites to be an important first step in determining how well external release detection monitoring will work at a particular site. Of primary importance are existing concentrations of total hydrocarbon vapors in soil gas in the unsaturated zone if vapor detection is to be the principal monitoring method. Likewise, existing contaminant concentrations in the soil below the UST system and the presence of floating free product on the water table are of principal concern if monitoring on the ground water is to be the principal detection method.

If EPA allows the use of external release detection in the final rule, more detailed guidance on performing site assessments may be provided at that time. In the meantime, EPA is soliciting information and comments on: (1) whether site assessments should be required at all UST systems or just those where the use of external release detection systems are required; (2) whether different types of information should be obtained in site assessments at new locations as compared with site assessments at existing UST systems; (3) the necessary elements of a site assessment; (4) the use of site assessment data in selection of release detection sensors and systems; (5) the types and levels of contamination at sites where no releases have ever occurred; and (6) the variations in contamination levels over time at sites where releases have been known to occur.

f. Other General Issues Concerning External Release Detection Methods; Solicitation of Public Comments and Performance Data

In discussing external release detection, an important distinction must be made between release detection sensors and release detection methods. A release detection sensor is a physical device capable of responding to released product. Examples are flame ionization detectors for vapors and colorimetric pastes for determining the presence of floating product. A release detection method is the entire procedure by which releases are detected. The design of an external release detection method includes three essential components: (1) Sensor selection, (2) network design, and (3) selection of a method for data analysis.

Sensor selection is the process of selecting one or more devices which will operate satisfactorily in the environment of the specific site under consideration. Several factors to be considered include: (1) whether the sensor will operate under saturated or unsaturated conditions (i.e., below or above an existing water table); (2) type of product to be detected; (3) necessary detection thresholds (e.g., vapor concentrations or product thicknesses); (4) sensor accuracy, precision, and drift; (5) sensor response times; (6) whether the sensor is to be operated automatically or manually; (7) whether the sensor is to be operated continuously or intermittently; (8) frequency of maintenance; and (9) the physical environment of the site, including such factors as ambient temperature range. In general, this information will be available from the manufacturer, and the release detection system owner or operator must ensure that appropriate sensors are chosen for the site in question. EPA believes that release detection sensors exist which have adequate sensitivity and which will function satisfactorily in the UST excavation area. EPA solicits comments on the adequacy of existing external release detection sensors and the type and values of minimum performance specifications which should be established as mandatory.

Network design is the process of determining the necessary numbers and locations of external release detection sensors, as well as the frequency of sampling. The overall objective of network design is to install a method which has the greatest practicable likelihood of detecting a release from the UST system and its associated piping. A useful detection method must also be capable of detecting a release as soon as possible to minimize hazards to human health and to prevent irreparable damage to the subsurface resource (and to minimize remedial action costs). The principal considerations in determining locations of wells and sensors are the geometry of the UST system (tanks and piping), the characteristics of the product, and factors which influence the mobility of product and vapors.

In general, EPA believes that the topic of network design is not well understood. In particular, the processes which govern product and vapor mobility and migration are poorly understood. Because product and vapor movement from a typical UST system is likely to involve three components (product, vapor, and water), exact prediction of the movement of product vapor in the subsurface environment is quite complex. While predictive methods are being developed by several investigators, product and vapor movement in the UST system excavation area is not well known at the present time. Today's requirements, which generally limit use of external methods to within or immediately below the excavation area, are intended to ensure that this uncertainty is kept to a minimum.

Factors which are believed to possibly affect network design include product characteristics, unsaturated zone characteristics, saturated zone characteristics, natural ambient environmental factors, and man-made site characteristics. These factors are listed in more detail below:

FACTORS INFLUENCING NETWORK DESIGN

Product Characteristics
- Vapor Pressure
- Molecular Weight
- Henry's Law Constant
- Dielectric Constant
- Density
- Water Solubility
- Viscosity
- Boiling Point

Unsaturated Zone Characteristics
- Air-Filled Porosity
- Pore Size and Shape
- Volumetric Water Content
- Unsaturated Zone Depth
- Soil Organic Matter Concentration
- Temperature and Temperature Gradients
- Soil Texture
- Retention
- Microbial Influence

Saturated Zone Characteristics
- Water Table Fluctuations
The first is to determine a release from network design and the impact related to external release detection performance characteristics. False positives and negatives from sight, taste, or odor will be influenced by the sensitivity of the observer's senses and by his subjective decisions. The number of false positives and negatives from the other three options depends on the decision values chosen (statistically significant variations, changes in the rate at which measured concentrations increase, or the action level selected) and on the sampling frequency. Depending on the selected action level and frequency of sampling, the number of false positives can be progressively reduced while the detection of small releases becomes progressively more difficult. The number of false positives has consequences to both the tank owner and to the regulator, who must decide what action to take when the detection system indicates that a release may have occurred. The number of false negatives also is important, since adverse environmental impacts will generally increase when a release continues undetected. EPA solicits comments, including relevant data and recommendations, concerning methods of data analysis for external release detection systems. 3. Requirements for New UST Systems (Section 280.41)

Today EPA is proposing in 280.41 to require that all new UST systems be provided with release detection before they begin operation. The proposal allows UST owners and operators to choose from a wide variety of different release detection methods provided that they meet the requirements for each method. Methods allowed include:

- Tank tightness testing with monthly inventory reconciliation;
- Vapor monitoring within the soil gas of the excavation area;
- Monitoring for liquids on the ground water;
- Monitoring for releases in an interception barrier;
- Automatic monitoring of product level and inventory control;
- Interstitial monitoring between the UST and a secondary barrier; and
- Other methods approved by the implementing agency.

These methods and the proposed performance requirements and limitations are discussed below. Any special conditions for use of these methods for hazardous substance UST systems is also discussed below.

a. Tank Tightness Testing and Inventory Reconciliation Controls (Section 280.41(c))

EPA is today proposing to allow the use of tank tightness testing and inventory reconciliation control (or a method of equivalent performance) in combination as one method of release detection at new petroleum UST systems. Each of these two release detection components, and the requirements proposed concerning their use, is discussed separately below.

(1) Tank Tightness Testing (Section 280.41(c)(1)). Tank tightness testing is the most commonly used procedure for determining whether an UST system is leaking. A wide variety of tightness testing techniques are available, including many that are described in the report, Underground Tank Leak Detection Methodology: A State-of-the-Art Review (EPA 1988). All these techniques test the integrity of the tank; some test the integrity of the piping. Owners or operators who choose to use a method which only tests the tank must use another technique for testing the piping.

Tank testing techniques can be classified as either volumetric or non-volumetric. Volumetric tests identify whether a system is tight by measuring product-level changes over time and converting these measurements to a flow rate based on tank geometry. Non-volumetric tests measure something other than product volume changes and, therefore, do not as easily define a flow rate. They simply indicate whether the tank or piping is leaking. These include ultrasound techniques and trace gas detectors.

The procedures for conducting volumetric tests generally involve filling the tank with product to a specified level and measuring the change in this level over a period of time. In addition, product temperature is measured so that the effects of temperature on product volume can be subtracted from the estimated product level measurement. If the estimated change in product level exceeds a certain amount, the system is judged to be non-tight. The various volumetric techniques differ in the method for measuring and recording the liquid level changes, in the temperature measurement and compensation procedures, in their data analysis methods, and their detection criterion.

There are a wide variety of volumetric tank tightness test methods currently available. All test methods require that dispensing operations at the UST be curtailed during the test. Some test methods overfill the tank, while others do not; some test the entire system, including piping, while others test either the tank or the piping. The most common test methods require extensive preparation to conduct a test, have a high cost per test, and as a consequence cannot be used frequently. More
recently developed systems can be permanently installed in the tank. These systems require initial capital investment, but can perform frequent tests with only minimum preparation and interruption to dispensing operations. These latter systems are the automatic product level monitoring systems that have a precision test mode for the conduct of a tightness test. (They are discussed in more detail in a later part of this section of the Preamble.)

The performance of the volumetric test methods is being evaluated in the EPA's research program being conducted in Edison, New Jersey and the test results will be available before the rule is finalized. In addition, the technological limits of volumetric tightness tests will also be determined.

As noted earlier in this preamble, preliminary results suggest that reliable detection of leak rates at 0.05 gal/hr may be scientifically possible for tanks whose capacity is less than 12,000 gal.

A major concern with this method of release detection is that several key factors can significantly undermine the test's accuracy in actual practice. A review of several of these techniques, prior to EPA’s National Motor Fuel Tank Survey in 1985, revealed that many of the leading commercially available procedures do not appear to adequately control these factors. Also, the way these tests are carried out at the site as well as their data analysis procedures, can provide other sources of operator-induced errors. Because tank tightness testing cannot be performed frequently, EPA considered not allowing the use of this method. However, the Agency has concluded that, because this method can provide reasonably accurate, though infrequent “checks” for releases, it should be allowed for release detection purposes. If it is used in compliance with several proposed performance requirements and limitations:

- The test must be used in combination with daily inventory measurements and monthly reconciliation techniques (or a test of equivalent performance);
- The test must be conducted at least every six months; and
- The test must be capable of detecting a release rate of at least 0.10 gallons per hour from the UST system, determined with a probability of detection of 0.99 and a probability of false alarms of 0.01.

Each of these limitations are discussed in more detail below.

(a) Tightness Tests Must Be Conducted at Least Every Six Months. As discussed earlier, EPA has proposed a general requirement that all new UST systems be provided with a method of release detection that conducts a test at least once every 30 days. EPA is also proposing to allow the use of tank tightness testing as a new UST system if it is conducted at least once every six months and is combined with daily inventory measurements and monthly reconciliation techniques.

(b) Tightness Tests Must Be Used in Combination With Inventory Reconciliation Techniques. As discussed previously in this Preamble, EPA has decided to propose the use of “frequent to continuous” release detection as part of the national strategy to regulate new UST systems. Numerous advantages were identified that caused the Agency to propose, at a minimum, monitoring for all new UST systems once every 30 days. However, the Agency believes it is unrealistic to require tank tightness testing that often. Tightness testing, as currently practiced, is a fairly expensive one-time procedure that requires the UST system to be out of service for a number of hours prior to and during the test. Because monthly testing is infeasible, the Agency is proposing that it must be combined with inventory reconciliation techniques (discussed in the next section of this Preamble) to be allowed to comply with today's release detection requirements for new UST systems.

The tank tightness testing technique is expected to be able to detect releases that may be too small for inventory reconciliation procedures to identify. In contrast, the inventory reconciliation is intended to address today's general requirement for frequent monitoring through the requirement of daily measurements reconciled at least monthly. Thus, the inventory reconciliation portion of this combined method of release detection is for use between the infrequent tightness tests required today.

The Agency considered allowing tightness testing alone for release detection. However, EPA believes that tightness testing can only be used practically on a relatively infrequent basis because of the cost and difficulty to the owner and operator associated with its use. Infrequent testing alone could provide too much time for the UST to leak in between the tests. Inventory reconciliation is intended to ensure that significant releases do not go undetected between tightness tests.

As discussed earlier, EPA has proposed a general requirement that all new UST systems be provided with a method of release detection that conducts a test at least once every 30 days. EPA is also proposing to allow the use of tank tightness testing as a new UST system if it is conducted at least once every six months and is combined with daily inventory measurements and monthly reconciliation techniques.

EPA’s review of the various schedules for tightness testing of new petroleum UST systems currently used in several states reveals testing frequencies between one to five years depending on the age of the UST system. Most states that allow tightness testing for new UST systems protected from corrosion require it be used with inventory reconciliation, as well as to be performed at a minimum once every four or five years. Thus, the standard proposed today is much more stringent than what has been established for new petroleum UST systems in several states (such as Wisconsin, Rhode Island, Maryland, and Delaware). This more frequent standard was developed in keeping with today’s proposed general approach to require more frequent monitoring in order to detect releases sooner. An important consideration in developing this proposed frequency was the Agency’s uncertainty about the long-term use of inventory controls for release detection purposes. (Discussed in more detail in the next subsection of this Preamble.)

EPA specifically solicits comment on the appropriateness of a semi-annual testing frequency at new UST systems. Information indicating that the performance of new UST systems protected from corrosion does not warrant semi-annual testing could cause EPA to require less frequent tank testing in the final rule (as do many established state UST programs). Another key consideration in the decision concerning the frequency of tank tightness testing is the effectiveness of inventory controls in detecting leaks. If a new UST system is provided with automated inventory control and reconciliation equipment, should EPA reduce the required frequency of tank tightness testing? On the other hand, to be consistent with its strategy to require “frequent to continuous” monitoring, should EPA allow tightness testing but require that it be used every 30 days, with the expectation that more practical, less expensive technologies may be developed that could be applied with such frequency in the future?

(c) Performance Standard for Tightness Tests. Today’s proposal specifies the performance standard for tightness testing in terms of the maximum release to be detected (0.10 gallons per hour), the probability of detection (P= 0.99), and the probability of false alarm (PFA= 0.01). A complete performance standard is proposed for tightness testing as a consequence of the advanced understanding of this technology. This exactness and reliability is also important considering the more infrequent testing schedule being considered for this test method. This standard applies to the testing of both the tanks and the underground piping.

As described earlier, a number of commercial tank testing techniques are currently available. Although the
commonly used NFPA criterion is 0.05 gallons per hour, and vendors of available testing techniques claim that their methods can reliably detect such a small release rate, at this time the Agency has not been provided with evidence that this standard is being reliably met by any device now in practice. EPA has initiated research that will evaluate the performance of many of the commercially available methods. This program is described in Protocol for Evaluating Volumetric Leak Detection Methods for Underground Storage Tanks (1986).

EPA has field experience with tank tightness testing. This experience is described in Underground Motor Fuel Storage Tanks: A National Survey (1988). The national survey experience suggests that the leak rate capable of being detected by current practice is higher than 0.05 gal/h. In the survey, EPA carried out a nationwide test of over 450 UST systems and was able to reliably detect releases of 0.1 gallons per hour with a P<sub>n</sub> = 0.95 and P<sub>a</sub> = 0.05. The Agency used a modified, commercial tightness testing procedure that emphasized numerous quality control/assurance procedures and was supported by carefully designed statistical analyses. These tests were conducted with skilled and experienced practitioners.

EPA rejected the widely used 0.05 gal/h criterion in developing today's proposal because the Agency presently believes that this standard is not being reliably achieved with the most common tank sizes in use today (4,000 to 12,000 gallons per tank). Consideration was given to setting today's performance standard at 0.20 gallons per hour. However, EPA technical staff and the experience of the practitioners who executed the national survey have indicated that, if presently available procedures and practices were modified and improved, they could achieve a reliable detection of leak rates smaller than 0.20 gallons per hour.

EPA believes that the ongoing tank test evaluation program will result in significant new information that will result in dramatic improvements of current practice over the next few years. With significant improvements in today's practice, EPA believes many testing procedures and techniques should be able to reliably detect a release rate between 0.05 and 0.10 gallons per hour in the tanks that are widely in use today. Although at the present time quantitative data is unavailable concerning the achievement of the above performance levels at larger tanks (e.g., greater than 20,000 gallons in volume), EPA doubts that those levels can be achieved at the larger tanks.

Testing methods are affected, to varying degrees, by factors such as temperature changes, trapped vapor pockets, condensation and evaporation, and tank-end deflection. Some of these factors can be controlled or minimized by proper design of the equipment and test procedures. The degree to which any of these factors are in effect during a given test will also vary between different tanks, and even between separate tests on the same tank. In the national field survey, at some of the UST systems, crews repeated tests at the same tank during the same day as well as at a different time several days later. The ability of the available test methods to compensate for these variables is not yet well known and there is an important reliance on the test operator to recognize and adjust for these factors as they occur. These factors must be monitored very closely because even the slightest changes can either mask leaks that exist, or mimic a leak where none exists.

Volatile liquids such as gasoline, jet fuel, and many solvents are sensitive to temperature variations. For example, a temperature decrease of 0.02 °F in one hour within a 6,000 gallon tank containing gasoline would cause a decrease in the volume of 0.084 gallon. This change exceeds the 0.05 gallon per hour rate now commonly used to indicate a leak (NFPA, 1983). Temperature changes of this magnitude within a tank are common. One reason for this is that the new product added to a tank is generally at a different temperature than product already in the tank. After product is added to the tank, it takes time for the tank contents to mix and achieve a nearly static condition. Even as the tank contents settle, the cooler, heavier product tends to settle towards the bottom of the tank, while the warmer, lighter product locates nearer the surface. In other words, the product tends to settle in layers, with a slight temperature drop from the surface to the bottom. This process is called stratification. With stratification, the rate of change of the temperature, and therefore the volume, may vary through the depth of the product.

Vapor pockets within the tank pose serious problems for tank tightness tests that require overfilling of the tank. These pockets are often present at high spots of sloped tanks or in protrusions, such as manways in the tops of tanks. These pockets of trapped vapor expand and contract with changes in temperature and barometric pressure. Furthermore, their size is difficult to estimate because they cannot be seen. Therefore, when present, they must be eliminated for a valid volumetric test to be performed.

Tank-end deflection may also affect the results of a tank tightness test. When a tank is filled in order to perform testing, the ends of the tank may deflect outward. The technician performing the test must be aware of this phenomenon and apply the necessary adjustments or corrections to ensure accurate results.

Finally, evaporation and condensation activity inside the tank can affect test results under certain conditions.

Volumetric tests generally cannot be accurately applied to large tanks. The 0.05 gallon per hour criterion was originally developed for a 0.001 gallon tank. Most testing practitioners will not apply their tests to tanks greater than 20,000 gallons. This is due to the increasing effect of many of the variables which cloud the accuracy of this type of test.

Automatic product level monitors that have the capability of compensating for temperature fluctuations can be used to conduct a precision tank tightness test and, if used semi-annually with monthly inventory controls for release detection purposes, they must meet the same standard as other volumetric tank tightness test methods. As with other volumetric tests, tank operations must be curtailed during the test. The direct access of automatic in-tank equipment offers several advantages over other tank tightness methods. First, the tests can be conducted frequently without expense and, with proper setup, have a significant impact on dispensing operations because the systems are permanently installed in the UST. Second, these methods maximize the available test time because the set-up time can be made to be minimal.

EPA recognizes that the performance standard proposed today for tank tightness testing is challenging, but preliminary results from the EPA tank test program suggests that this standard is achievable. However, more frequent data sampling, a longer test time, improved compensation schemes, and better analysis algorithms might be required of available methods to achieve it.

(2) Inventory Reconciliation Controls (Section 280.41(c)(2)). Inventory reconciliation techniques detect releases by reconciling product deliveries, withdrawals and inventory remaining in the UST system each day to identify shortages. A large shortage in a single day or small persistent shortages over a month can indicate a release of product...
As discussed previously in the section on tank tightness testing, today's proposal only allows the use of tightness testing to detect leaks if it is used with inventory reconciliation. Monthly inventory reconciliation is proposed as the means for detecting any significant releases that could occur between the more accurate, but less frequent, tightness tests.

Major concerns have been identified concerning the use of manual inventory control as a release detection method with new petroleum UST systems. Manual inventory control depends on considerable operator involvement, and with it the attendant opportunity for human error. In fact, several studies have shown that inventory control records often contain errors that diminish their utility for release detection. In one EPA study, Underground Motor Fuel Storage Tanks: A National Survey (where survey participants were required to supply one month's worth of inventory data on forms supplied by the EPA), 80 percent of the participants initially supplied incomplete or incorrect inventory data. Some of these records were corrected or completed through intensive follow-up contacts with EPA, and 50 percent of the inventory records were eventually complete enough for analysis. The Agency has serious reservations about depending on a long-term basis on manual inventory control for release detection because of this reliability issue. The Agency solicits comment and information on this issue.

Inventory reconciliation is a common and highly encouraged practice in the petroleum industry. Inventory is reconciled for management of the inventory, reorder policy, control functions and detection of large uncontrolled releases. Most state and local regulations require it as an element of their release detection strategy, because it is inexpensive and can be done as part of the normal day's activities. Product deliveries, withdrawals, and tank inventory are reconciled daily to identify shortages or overages. Persistent shortages (or overages) over one or more months suggest the possibility of uncontrolled release of product from the UST system. Daily product level and dispensing pump measurements are required for meaningful inventory reconciliation. Product level measurements are made manually with a calibrated stick, or automatically with an in-tank product level monitor. The precision of either measurement can be approximately one-eighth inch. The automatic product level monitor has several important advantages over manual stick measurements. First, the measurements are not subject to operator error which could arise from misreading or improperly using the stick. Second, a more sophisticated data collection and analysis approach can be accommodated with the automatic monitors.

The performance of inventory reconciliation has not been articulated. The major sources of interference: "noise" that limit the detection of releases using this methodology are:

- Withdrawal volume;
- Delivery volume;
- Product expansion or contraction;
- Structural deformation of the tank;
- Pilefage; and
- Product level measurement.

The first five sources of noise are systematic and are the largest sources of error in reconciling inventory. The fluctuation in product level measurement is random if the stick measurements are properly executed. Delivery uncertainties of several hundred gallons can occur. Withdrawal errors produced by pump calibration errors can be large. Pilefage will obviously affect the accuracy of the reconciliation. Product temperature changes and structural deformation can be large enough to be sensed by the stick measurements if the stick measurement is made shortly after filling a tank.

There are many means to reconcile inventory data. Some methods attempt to compensate for the errors and claim greater accuracy than the traditional method of reconciliation. Several different detection criteria have been developed to define a leak. The volume threshold is the most commonly used. A volume threshold is established and a leak is declared if a monthly shrinkage crosses a threshold. Thresholds of 100 to 200 gallons are typical. Another detection criterion requires that the difference in the number of overages or shortages each month exceed a specified threshold before a leak is suspected.

The primary limitations proposed today for the use of inventory reconciliation techniques for the purpose of release detection at new UST systems are:

- Inventory reconciliation (or another test of equivalent performance) must be used in combination with tightness testing:
  - Inventory reconciliation controls must include reconciliation of product inputs, withdrawals and stored inventory each operating day so that a release greater than 5 percent of the flow through on a weekly basis or 0.5 percent of the flow through on a monthly basis will be detected.
  - The height of the stored inventory must be measured to a 0.125 inch accuracy:
    - Inputs must be reconciled with delivery receipts by measurement of tank inventory prior to and after delivery;
    - Deliveries must be made through a drop tube;
    - The product dispensing must be metered and recorded within an accuracy of 5 cubic inches for every 5 gallons of regulated substance withdrawn; and
    - The inside of the tank must be checked for the presence of water at least every 30 days if any portion of the tank is in ground water.

Each of these performance requirements and limitations are discussed below.

(a) Inventory Reconciliation (or Another Method of Equivalent Performance) May Be Used in Combination With Tightness Testing (Section 280.41(c)). Today's proposal requires that inventory reconciliation be used together with semi-annual tank tightness testing. Although inventory reconciliation is considered with the measurement of product volume in the tank, it is generally believed to be less accurate than tank tightness testing. However, inventory reconciliation can provide a nearly continuous method of release detection once a base analysis period is obtained. Typically, the reconciliation is done monthly using 30 days of data. Therefore, a well-designed and properly executed inventory reconciliation test is believed to complement the more accurate but more infrequently done tightness tests.

Today's proposed rule also allows for any method or combination of methods of equivalent performance to be substituted for inventory reconciliation providing that the method(s) perform a tank test with the same frequency, tests the entire tank system (including the piping), and has the same or better performance. For example, an automatic in-tank volumetric level testing conducted weekly and monthly combined with an automatic pipe monitoring system would be an example of a substitute system, if the performance of these tests are equal to or better than the performance required of inventory reconciliation (discussed below).

(b) Inventory Reconciliation Performance (Section 280.41(c)(2)). Today's proposal sets performance requirements for inventory...
reconciliation that generally agree with the American Petroleum Institute’s Recommended Practice #1621, which provides detailed guidance on inventory reconciliation practices. Product inputs, withdrawals and stored inventory must be reconciled each operating day. The reconciliation must be accurate enough to identify an inventory loss of five percent of product volume flow through on a weekly basis and 0.5 percent of flow through on a monthly basis. The Agency is not proposing detailed requirements on inventory reconciliation procedures and report formats.

The required reconciliation accuracy of 0.5 percent of flow through on a monthly basis that is being proposed today is an API #1621 recommended practice and is equivalent to a 0.06 gallon loss in a typical monthly flow through of 18,000 gallons. Even though the 0.06 gallon error in one day may exceed this value, when 30 days are considered, the errors in individual days tend to balance out.

EPA believes that this monthly standard can be met if the inventory control procedures are followed consistently. Equipment is commercially available that can accomplish this automatically. The 5 percent of weekly flow through loss standard is similar to the California weekly loss standard and is intended to provide early warning of major losses.

Five percent of the weekly flow through for a typical monthly flow through of 18,000 gallons corresponds to approximately 900 gallons. The Agency included this requirement because it believes that the additional effort required to compute a weekly loss is justified by the additional confidence that large releases will be detected quickly.

The Agency is not aware of any research that suggests an optimum weekly loss standard. However, EPA believes that a more restrictive weekly loss standard (e.g., 2 percent of the flow through) would result in excessive false alarms because of the unavoidable inaccuracies associated with inventory measurements. On the other hand, the Agency believes that a less restrictive weekly loss standard (e.g., 0.1 percent of the flow through) would allow large releases to go undetected for too long. The 5 percent standard is believed to be achievable with consistent adherence to the industry-recommended inventory reconciliation practices. EPA also considered including a daily loss standard in today’s proposal, but concluded that the interpretation of a single day’s reconciliation is better left to the operator’s judgment because of the many potential sources of error.

The probability of detection and the probability of false alarms for the above detection thresholds are not known, but sufficient data exists to evaluate and amend performance of the proposed inventory reconciliation performance requirements before the rule is finalized. At present, EPA is proposing to follow recommended industry practices, but requests comments and information on this approach.

(c) Stored Inventory Measurement Accuracy (Section 280.41(c)(2)(i)). Today’s proposal requires that the height of the stored product be measured to a 0.125 inch accuracy. The Agency believes that a major source of error in manual inventory control practices involves measurement of the height of the stored product. There are many reported cases of operators using improperly calibrated or damaged gauging poles, of operators neglecting to take tank level readings during bad weather, and of miscalculation of the stored volume from the tank level reading. Most manual gauging poles are calibrated in 0.125 inch increments. Therefore, if the operator adheres to standard industry practices in the gauging procedure, greater accuracy can be achieved through careful measurement practices. Although today’s proposal does not require automatic level sensing equipment, the Agency believes that they too can significantly reduce the incidence of errors in inventory control.

(d) Delivery Reconciliation (Section 280.41(c)(2)(iii)). Another limitation in today’s proposal is that product deliveries must be reconciled by measuring the tank before and after each delivery. The Agency is concerned that neither delivery receipts or tank level readings taken after delivery are consistently accurate. The Agency is therefore requiring that they be compared to each other to increase confidence that actual deliveries are accurately recorded.

(e) Drop Tubes (Section 280.41(c)(2)(iv)). Today’s proposal requires that deliveries be made using a drop tube that extends to within one foot of the tank bottom. This tube is usually attached to the tank’s fill pipe and minimizes the surface waves during product deliveries. A tank that is not equipped with a drop tube cannot be accurately measured for inventory for several hours after a delivery, making it difficult to reconcile the delivery. This appears to already be a common practice because many existing UST systems are reported to be already equipped with drop tubes.

(f) Dispensing Meters (Section 280.41(c)(2)(vi)). Today’s proposal requires that product dispensing be accurately metered. Accurate metering of product withdrawals is essential to inventory control. The Agency chose the National Conference on Weights and Measures standard of 5 cubic inches for every 5 gallons of product withdrawn. This is equivalent to 0.6 percent; which is the acceptable tolerance level for retail gasoline dispensing meters that retail gasoline facilities are already required to meet. However, many UST systems, such as those used for fleet service or farm use, are not metered this accurately. The Agency recognizes that some owners and operators if they choose this release detection method may have to install dispensing meters, or calibrate their existing meters to meet this requirement.

(g) Water Detection (Section 280.41(c)(2)(vii)). Today’s proposal also requires that the operator check for water in the tank at least every 30 days if any portion of the tank is located in water. Ground water can intrude through a hole into a tank if it is at least partially below the water table. Petroleum products are less dense and immiscible in water, so incoming water will appear at the bottom of the tank. Generally, with manual inventory controls, the operator can apply a water-sensitive paste to the end of the gauge pole to determine how much water is in the tank. (Automatic inventory measuring equipment is also available that can measure the presence and level of water in the bottom of an UST system.)

Water can also enter the tank through other means such as product deliveries, but the presence of (or rapid increases in) water in a petroleum UST system could result from ground-water intrusion and may need further investigation if the UST system is in ground water. Checking for water in the tank is recommended by the American Petroleum Institute’s Recommended Practice 1621 as part of the daily inventory control practice. However, the Agency believes that for release detection purposes, only those tanks that are in ground water need to be checked for water, and that the inspection interval need only be every 30 days. A recent national EPA survey of motor fuel tanks found that approximately 20 percent of the UST systems are reported to be at least partially located within ground water.

(h) Issues for Public Comment. EPA is seeking public comment and performance-related information regarding the use of manual inventory
reconciliation for release detection. EPA is particularly interested in receiving comment on the appropriateness of the limitations proposed for the use of the method. Because of the limited performance data concerning the method, EPA has had to develop today's proposal based on partial information. Therefore, EPA is specially seeking information regarding the field performance of manual inventory controls or the results of any relevant performance evaluation studies. The Agency is also interested in receiving comment and information concerning automatic inventory measurement/reconciliation equipment. The Agency is considering whether it should be required in lieu of allowing the use of manual methods of inventory control with tank tightness testing at new UST systems.

In addition to these general areas, the Agency is interested in comments concerning three specific issues. The first of these concerns the accuracy requirement for reconciliations. Accuracies of 5 percent of flow through on a weekly basis and 0.5 percent on a monthly basis are required in today's proposal. Should these accuracy values be increased or decreased? Should they be expressed as single values or as fractions of the tank volume instead of fractions of the flow through? Should there be an accuracy requirement for a single day's reconciliation?

A second specific issue that the EPA is interested in receiving comment on is the use of inventory control without metered dispensers. A 1984 EPA Chemical Advisory provides an inventory control procedure for non-metered tanks. In this method, the tank level is recorded using a gauge pole before and after each withdrawal and delivery. Changes in the tank level are estimated by comparing level readings made immediately before a withdrawal to the reading after the previous withdrawal. These differences can be accumulated over a period of time to calculate a loss or gain. The Agency did not allow this method for petroleum UST systems in today's proposal because it does not know of any criteria that can be used with this method to indicate a release. The Agency also does not have any way of confirming the accuracy and reliability of this method and seeks comment on the performance of this type of inventory control method and whether it should be allowed in the final regulations.

EPA is also interested in receiving comments on whether inventory controls should be required at all UST systems (where it is feasible to apply) before and after UST owners and operators phase in release detection over a 9- to 5-year period (the phase-in of release detection was discussed earlier in this preamble. As discussed earlier, EPA has identified several concerns with the current practice of manual inventory controls and is doubtful that it can be meaningfully applied on a widespread basis without significant increases in training and technical assistance. Even though numerous state UST programs require inventory control, today's proposal only requires that it begin within 3 to 5 years, and only if tank tightness testing is chosen as the method of release detection. EPA believes that application of the general phase-in schedule to include inventory controls will provide the regulated community with sufficient time to develop and implement the expertise and training necessary to ensure manual inventory requirements are carried out in a reliable way. EPA considered requiring a more rapid application of inventory controls at all UST systems (where it is feasible) than is proposed for the other methods of release detection, but is concerned that widespread implementation problems will result because of the labor-intensive nature of the method and the significant improvements and training that will be necessary to ensure sound practices are followed. The Agency solicits comment and information on this issue, including whether inventory controls would provide significant benefits and improvements in environmental protection if required at all UST systems where it is feasible.

b. Testing or Monitoring for Vapors Within the Soil Gas of the Excavation Area (Section 280.41(d))

Liquid hydrocarbon and other volatile products will vaporize when released into the soil surrounding the UST system. Today's proposal in 280.41(d) allows the use of a monitoring method that samples the soil gas in the excavation area surrounding the UST system to detect the presence of vapors that result from such releases.

The use of soil vapor monitoring for UST system release detection is very recent. Therefore, only limited information and experience exists with vapor sensors used in this capacity. However, vapor monitoring has been used for other purposes for a number of years, such as for industrial safety and ground-water plume mapping. As a result, a wide variety of vapor detection devices are available. Commercially-available, manually operated devices use several operating principles, including flame ionization, gas chromatography, infrared absorption, and photo-ionization.

Permanently installed continuous sensors use several operating principles, including catalytic combustion, diffusion, solid state semi-conductors, and product permeable materials. Although there is little documented performance data for the wide range of vapor detection equipment that is commercially available for release detection, many of these devices are expected to be able to detect very small concentrations. (EPA has already begun a survey of available methods to validate information obtained from vendors.) For example, portable gas chromatographs can detect and identify compounds in the parts per billion range; photo-ionization devices in the parts per million range. The limiting factor in the systems' accuracy is more likely to be the design and placement of sensors in wells so as to intercept vapors, and the capability of the release detection equipment to interpret correctly the same readings, rather than the sensors' sensitivity in detecting them.

In evaluating the use of this method, the Agency had to consider the present lack of information concerning sensor capabilities and the characteristics of vapor transport in the unsaturated zone under various conditions. Likewise, the Agency had to consider the uncertainties associated with interpreting the meaning of vapor gas measurements at sites where significant previous contamination levels exist in the form of background interferences.

Although EPA is currently undertaking several studies to better characterize these processes, only preliminary results will likely be available in some areas by the time EPA develops a final rule. Thus, the Agency considered rejecting the use of this method for release detection purposes until many of these technical issues are settled.

However, EPA has concluded that this method of leak detection may be usefully applied in a manner that will detect releases if used within certain limitations. Limited data based on practical field experience suggests that the vapor levels in the excavation zone will rapidly and dramatically increase when a release of a high volatile liquid (for example, gasoline) occurs. One study found that when fuel samples were introduced at 10 feet below the ground surface, trace quantities of vapors were detected at the surface within 10 hours. Vendors of these devices widely claim that vapor levels jump to 3,000 to 12,000 ppm when
gasoline releases into the excavation area. Therefore, today's proposal provides several important limitations on the use of this method that, when combined with corrective action of releases that are detected in the UST excavation area, are expected to effectively minimize potential adverse impacts to ground water.

Several primary limitations on the use of soil vapor monitoring for release detection are being proposed today:

- The backfill must be sufficiently porous to allow diffusion of vapors readily into the excavation area;
- The released liquid must be sufficiently volatile to result in detectable vapor levels;
- The measurement of soil gas contamination must not be rendered inoperable by ground water, rainfall, or flood conditions so that releases cannot be detected for more than 30 days;
- The level of background vapor contamination must not interfere with the detection of releases from the UST system, and cannot be greater than 500 ppm of total hydrocarbons as measured in the soil gas;
- The monitoring equipment must be capable of being pre-set to detect the type of regulated substance stored in the tank system at significant levels above background contamination in the excavation area;
- The monitoring well network (including the number and location of monitoring wells) must be designed to detect a release from any portion of the UST system in the excavation area, and be based on an assessment of the conditions immediately surrounding the UST system; and
- All monitoring wells open to outside access must be clearly marked for their purpose and secured from unauthorized entry.

Each of these limitations is discussed in more detail below.

1. Porous Backfill in the Excavation Area (Section 280.41(d)(1)). Today's proposal limits the use of this method of release detection to UST excavation areas that have sufficient porosity for the diffusion of vapors from releases to the monitoring wells in the excavation area. As previously mentioned, EPA has recently begun the study of characteristics of vapor transport in the unsaturated zone. However, rapid transport of vapors would occur in many of the types of backfill that are used when proper installation procedures are followed (e.g., use of pea gravel, sand, crushed rock). Therefore, this proposed limitation is intended to exclude the use of this method at existing UST systems where soil removed from the excavation area was simply placed back at the time of installation, particularly if less than the most porous types of soil were used. The Agency is less confident that vapor detection will work as reliably under conditions where the soil gases might be just as likely to diffuse into the surrounding soils as into the other parts of the excavation itself, such as excavation areas refilled with native surrounding soils or at sites with previous man-made disruptions (for example, pipeline conduits and foundations) within or beside the excavation area. The Agency suspects that many older installations will not be able to meet this limitation. Newer installations will generally be surrounded by porous soils if recommended good installation practices were followed.

2. The Volatility of the Liquid Stored (Section 280.41(d)(2)). Liquids volatilize at different rates and, thus, intrinsically make available different concentrations of vapor gases for detection when a release occurs. Gasoline and many other petroleum products and solvents contain highly volatile components that are expected to produce high levels of vapors in the excavation area as a result of a release. Other substances, such as diesel fuels or heating oils, have a much lower volatility and will produce a much lower level of vapors as a result of a release. Today's proposal includes a general performance standard that limits the use of this method to UST systems storing liquids that are sufficiently volatile to be detected by the device and sampling method employed.

Sampling of gases may be either active (e.g., a soil gas sample is sucked through tubing to a central detection device) or passive (the gas travels unassisted based on the natural rate of diffusion through the excavation soil to the sensor). Thus, passive systems of vapor detection are expected to be less likely to meet this criterion, particularly with the less volatile substances (e.g., diesel fuels), than the more active sampling devices that mechanically draw soil gases towards the sensors. In general, the passive detectors may also need to be set to detect lower concentrations of vapors than the active sampling sensors, and also may need to have more monitoring sensors to be able to detect the volatilized gases from a release into the excavation area. EPA expects that the determination of whether releases of the product stored in the UST will be detected by a particular network of sensors is necessarily a site-by-site determination and cannot be specified for all sites in regulation. The volatility of the substance, the type of backfill in the excavation area, the type of sampling device used (active or passive), as well as the location and number of wells employed must all be considered together to determine if this limitation can be met at the site.

Today's general standard is intended to provide state and local governments and the regulated community the flexibility to design systems that are appropriate to the particular excavation area, the tank system configurations, and the substances stored. EPA has initiated several studies that will more completely characterize these factors and how they need to be considered. If the Agency decides to allow this method of release detection in the final rule, guidance will be provided on how to assure this limitation is met.

3. Avoidance of Other Interferences (Section 280.41(d)(3)). EPA is today proposing a general performance standard that requires vapor monitoring be used only where ground water, rainfall, or soil moisture will not render the monitoring technique inoperable so that a release could go undetected for more than 30 days. This limitation is intended to ensure that the owner and operator applies this method at a particular site only after determining there are no interferences that could render this method of monitoring useless for release detection purposes over extended periods of time. Vapor monitoring sensors must not be located in the excavation area where they would be subject to inundation by a high water table. Also, at sites located in areas prone to flooding for extended periods of time, this method would not work and is insufficient for release detection purposes. A site located in a 25-year flood plain, for example, may not be able to make use of this method of detection if it is located in the excavation area such that it could be inundated by these flood waters for more than 30 days. Finally, in locations where heavy and continuous levels of precipitation are common, the type of monitoring method chosen, including the location of wells, would have to be able to detect soil vapor contaminants under these conditions at least every 30 days. The adequacy of detection performance under frozen topsoil conditions should also be considered.

4. Background Contamination and the Capability of Vapor Monitoring Equipment (Section 280.41(d)(4)). Today EPA is proposing to limit the use of external vapor monitoring methods to sites that have relatively low levels of background concentrations of hydrocarbons to prevent an excessive number of false alarms and false
negatives (leaks not being detected). Previous contamination from surface spills and leaks can contaminate the soil and ground water to the point where small, slowly developing leaks may be difficult to detect. Natural factors such as fluctuating barometric pressure, temperature, soil moisture content, methane, microbial activity and groundwater elevation and direction are believed to contribute to fluctuations in contaminant levels that are measured by external leak detection methods at previously contaminated sites. The Agency has sought to develop a standard for when existing contamination is so high as to prevent the selection and use of vapor monitoring methods as an option in detecting new leaks or spills.

There appears to be very little experience with applying vapor monitoring to hazardous substances. The proposed wording in 280.41(d)(4) requires that the level of background contamination not interfere with the detection of release. This general performance standard establishes the limitation that all volatile hazardous substances are, in a similar manner, masked by the same background interferences as are volatile petroleum products when they are subject to vapor monitoring in the excavation area. This general standard is intended to make it clear that with the use of this type of method, it is incumbent upon the owner and operator to determine how the problem of background concentration will be adequately controlled given the sensitivity of the equipment used, the volatility of the substance stored, and the background level (if any) of contamination at the site’s excavation area.

Today EPA is proposing to limit the use of this method to sites that have a background concentration of vapors in the excavation area of no more than 500 ppm of total hydrocarbons. This requirement stems in part from EPA’s concerns about the interferences that are posed to this detection method by background vapor concentrations from prior releases: for example, available field data suggest that background vapor concentrations in the excavation areas at existing retail gasoline stations may range from essentially zero to 500,000 ppm. EPA is planning a field monitoring program to better characterize background vapor concentrations. However, it is expected that there will often be some background concentrations of vapor contamination in the excavation areas surrounding many UST systems that stem from an accumulation of small spills as a result of past poor housekeeping practices.

The proposed requirement is also based upon consideration of the unlikely event of a release occurring that adversely affects human health and the environment while the background concentration of total hydrocarbons in the excavation area remains below 500 ppm. As stated earlier, vapor detection sensors are believed to be very sensitive for use in monitoring for releases because they use the phenomenon that volatile liquids such as gasoline will, in a porous soil medium such as sand, rapidly volatilize and spread out through diffusion in the soil at high vapor concentrations that are relatively distant from the source of contamination. EPA has documented cases where vapors traveled hundreds of feet underground from the location of the volatile liquid that was released underground. Vapors have been noted in many cases to travel much farther than the liquids released underground, though not necessarily in the same direction. With an ongoing release (a leaking tank or pipe) or a large spill, soil gas vapor concentrations will generally increase to high levels in the presence of this continuing source of volatile liquid in the excavation area. With small spills of limited volume (for example the accumulation of many small spills from sloppy past practices), similar to the evaporation of liquid gasoline above ground, the volatilization/diffusion process will continue underground until the residual vapor has almost entirely evaporated—except for residual amounts that become bound to the soil. Thus, a low background contamination vapor level in the soil gas of the porous soil medium that typically surrounds an UST system in the excavation area is a good indication that no recently released liquids are available nearby to be volatilized.

By setting today’s proposed standard at a maximum background concentration of 500 ppm of total hydrocarbons in the soil gas of the excavation area, EPA intends to not allow vapor monitoring at sites with higher background concentrations (for example, 1000 ppm) that might, under some circumstances such as improper well placement, result in a release going undetected because it was masked by pre-established contamination levels. The level proposed today may actually be much lower than could be tolerated by available vapor monitoring methods for purposes of detecting releases into an UST excavation area. A release of a volatile liquid into an excavation area constructed according to current recommended practices is reported (by vendors of this equipment and some local officials already allowing it) to diffuse rapidly through the excavation area soils at much higher concentrations than 1000 ppm. However, particularly at background soil gas vapor concentrations of higher than 500 ppm, the Agency is concerned that an UST site might already have a need to undertake corrective action in accordance with Subparts F and G of today’s proposed rule.

The Agency also considered setting the maximum allowed level of soil gas background contamination much lower, for example, at a concentration of 100 ppm total hydrocarbons. At this lower threshold level, however, the Agency is concerned that measured concentrations of total organic hydrocarbons in the soil gas of the excavation area can fluctuate widely due to: (1) Small amounts of residual liquid contamination bound to the soil that can volatilize when the barometric pressure lowers; (2) a rise in the nearby water table that ‘frees some residual contamination previously bound within the soil matrix that then volatilizes; (3) a new surface spill, even a very small one; or (4) the impacts of several other factors currently under study by the Agency but not completely understood yet. Because of such factors, EPA believes setting the background standard at 100 ppm in the soil gas of the excavation area would virtually eliminate the use of this method of monitoring at existing sites because the number of false positives would be unacceptably high. This low background level was not chosen also because it is not believed to be necessary for assuring that a release of volatile liquids in the excavation area will be detected. For example, liquids present in the soil of the excavation area at concentrations below 100 ppm of total organic hydrocarbons (that have not yet completely volatilized) are expected to result in concentrations of total hydrocarbons in the soil gas that are much higher than 100-500 ppm. Thus, this approach coincides with EPA’s proposed requirements on release reporting, discussed later in this Preamble, that requires reporting of all soil contamination that is greater than 100 ppm of total hydrocarbons.

The Agency is aware that some methods, such as the use of tracers in the tank, may permit external leak detection monitoring to be used at existing sites with relatively high background concentrations of hydrocarbons. Careful selection of the sensor, design of the monitoring network, and manner in which the data
is interpreted from external leak detection methods may allow their use at sites where previous contamination has occurred. The Agency does not seek to limit the development or use of these methods at sites with previous contamination.

The Agency seeks to encourage the use of vapor monitoring so as to assure accurate and early detection of leaks; however, it may be necessary in the final rule to limit the use of the method through the establishment of a single background contamination value (500 ppm TOC) but ranges of contaminant levels where the use of vapor monitoring may be preferred, marginal, or unacceptable. Data from soil-gas measurements or soil cores, made during the site characterization effort, may be used to assess the applicability of a particular vapor monitoring system. Factors such as seasonal variability, network design, and method selection, which are known to affect soil-core and soil-gas measurement data, are presumed to be less important in the measurement of existing contaminant concentrations at sites when ranges of background concentrations are used to predict the accuracy and reliability of a vapor monitoring system at a particular site. Comments are solicited on this approach as well as on the procedures to be used in reporting data on existing contaminant concentrations. What ranges can be established to limit the use of external leak detection at existing, previously contaminated sites?

Another alternative to the establishment of standard, or ranges, to limit the use of vapor monitoring at sites with relatively high background levels of contaminants is the on-site calibration of a vapor monitoring system with a small, controlled release of a volatile tracer. Such a test would provide an estimate for the amount of product that could be detected from a leaking tank and the time that would be required for the leak to be detected. Such an approach would be particularly useful in setting the alarm level for an external vapor monitoring system. However, future research is required before the Agency can provide technical guidance on this approach for assessing the performance of vapor monitoring equipment. Comments are solicited on this concept.

(5) Must Be Capable of Being Pre-Set To Detect the Type of Substance Stored at Significant Levels Above Background in the Excavation Area (Section 280.41(d)(6)). In developing today's proposal for vapor monitoring methods, EPA also considered proposing a threshold sensitivity requirement. For example, devices that are designed to detect only the explosive limits of hydrocarbon vapors would not be able to meet the requirements proposed today. However, as mentioned previously, some devices are available that can detect concentrations of contaminants in soil gas in the parts per billion range. EPA has proposed that the monitoring device used must be able to detect the background concentration level in the excavation area (which must be less than 500 ppm of total organic hydrocarbons) and "any significant increases" above it. The determination of what constitutes a "significant increase" for detection purposes will depend in part on what is the background level in the excavation area and the volatility of the substance stored in the UST system. A small increase over the background level would have more significance for lower volatility substances such as fuel oil than it would for highly volatile substances such as gasoline.

What is "significant"? may also differ between passive and active vapor monitoring methods, with smaller increases having more significance for passive methods that require vapors to reach the sensors through the process of diffusion. Such small increases have less importance with methods that advect (mechanically pull) vapors to the monitoring sensors through suction, unless an increase in the level continues over time. Today's minimum requirements for at least one measurement every 30 days will result in numerous readings that could be evaluated to determine whether such increasing concentrations over time represent a statistically significant trend.

EPA believes that evaluation of soil gas concentrations over time will identify the trends that will define a significant increase. Such trend analysis may reveal unabated increases in concentrations that provide clear evidence of a release. The Agency has proposed several studies concerned with environmental monitoring techniques. The results of these efforts are expected to be provided in guidance that will further explain how trend analysis should be used to determine whether an increase is actually significant or not. For example, any rapid and dramatic jump in concentration levels in the excavation area soil gas above the maximum background level of 500 ppm may be considered significant, for example, a measured jump to 1000 ppm of total organic hydrocarbons.

In today's proposal, the background standard against which a "significant increase" is judged is expressed in terms of a volumetric concentration of total organic hydrocarbons. This reference standard was chosen because it is a common measurement that can be made for all volatile substances. Vapor monitoring sensors can also be designed to detect particular constituents (such as benzene, xylene, and toluene) or volatile organic compounds (VOCs) in general. The determination of what is measured can significantly affect the way measurements are performed. For example, VOCs (including benzene) make up a small portion of the total hydrocarbons in gasoline. Therefore, equally effective monitoring would have to take place at more closely lower concentrations for these other substances to assure that rapid detection would take place (for example, benzene at 5 ppm and VOCs at 125 ppm). Likewise, VOCs would tend to evaporate and diffuse very rapidly while the total hydrocarbon measurement would be relatively slower to diminish through the volatilization/diffusion process. Thus, monitoring for benzene at low levels could miss very high concentrations of total hydrocarbons in the excavation area that are the result of large old leaks or spills where the passage of time has allowed the "light ends" of the product (e.g., benzene, toluene, and xylene) to evaporate and move away through diffusion.

Today's proposal is in terms of a total organic hydrocarbon measurement in the soil gas because it is believed to be a more thorough test of the condition of the environment. It is at a higher level than corresponding values for benzene or VOCs because it measures the complete volatile fraction of a released regulated substance. For example, small concentrations of petroleum in the soil are generally going to produce high levels in the soil gas because of the volatility of hydrocarbons. Thus, EPA believes that 500 ppm total hydrocarbons found in the soil gas will be indicative of a much smaller concentration (e.g., 50 ppm) of total hydrocarbons in the soil or ground water.

(6) Sensor and Well Network Based on Assessment of the Excavation Area (Section 280.41(d)(6)). The number, type, and locations of sensors or wells in the excavation zone are important elements in the success or failure of vapor monitoring to reliably and quickly detect releases. EPA considered the need to develop design requirements, such as the number and location of wells and their construction requirements. However, a general performance standard was proposed instead because...
the optimum design of any given vapor monitoring system is based on the consideration of several site-specific factors, such as the type of soils in the excavation area; the level of the background contamination in the soil gas; the location of the water table; the size, number, and configuration of the tanks; the volatility of substance stored; and the type and location of monitoring devices used (e.g., passive or active, periodic or continuous sampling). Therefore, the performance standard simply requires that a monitoring well network be designed that is capable of intercepting the vapors resulting from any release of the regulated substance stored at that particular site. To comply with this requirement, a brief assessment of the factors mentioned above will be necessary to determine how many sensors or wells are needed, including their design and location. EPA has initiated research into the factors that impact monitoring well network design and will provide guidance on this area if vapor monitoring wells are allowed under the final rules. (See General Requirements section for more details concerning site assessments, well networks, sensor capabilities, and data analysis: all are topics on which the Agency is today seeking comment and information.)

This limitation is also intended to ensure that all detection takes place within the excavation area. Vendors of these devices commonly report that they should be used within the excavation area and local officials contacted by EPA who allow the use of this method have reported that this is a requirement they commonly employ to ensure more reliable release detection. Therefore, because of present limitations concerning data on soil vapor transport and the likelihood that vapors will disperse more quickly in the excavation area than in the surrounding undisturbed native soils, EPA has proposed limiting the use of vapor monitoring to within the excavation area.

(2) Marking Monitoring Wells and Securing from Tampering (Section 280.41(d)(7)). The final condition proposed for this method of release detection is that all monitoring wells be clearly marked and closed to outside access and tampering. This marking should make it distinct in appearance from that of the fill pipe. EPA has been informed by state, local, and industry officials about incidents where, for example, product deliveries have been inadvertently introduced into monitoring wells. EPA is concerned that such incidents could increase with today's proposed requirement that all vapor monitoring wells be located within the excavation area of the UST system. This proposal could also result in the placement of wells in close proximity to the tank fill port.

The requirement that monitoring wells be marked and secured from tampering can be met by simply locking well ports to prevent unauthorized outside entry and marking them as "observation wells." Care should be taken to not mark them with a color that signifies a fill port under the marking systems now prevalent in the retail gasoline marketing industry (as recommended by the American Petroleum Institute).

(8) Issues for Public Comment. Because of the limited experience with vapor monitoring as a release detection method, EPA is requesting comment on the appropriateness of each of the proposed requirements and standards, with supporting data and studies where available. Comments and information on detection limits, probabilities of detection and false alarms for various equipment, as well as on the appropriateness of every 30-day sampling using vapor monitoring is also solicited. EPA is especially interested in receiving information regarding the field performance of vapor sensors in detecting releases from underground storage tanks. The Agency requests comments specifically on whether the use of this technology should be limited at existing UST systems. Information and comments concerning the applicability and reliability of passive versus active vapor monitoring/sampling methods is requested.

The Agency requests public comment and available information, including summaries of field experiences, that would provide an indication of what constitutes an appropriate maximum background concentration and what constitutes a significant increase above background levels of contamination in the soil gas of the excavation area. For example, at an UST storing gasoline, would an increase of 100 ppm, 200 ppm, 400 ppm, or 1000 ppm total hydrocarbons in the excavation area constitute a significant increase for release detection purposes? Are there advantages and disadvantages in the selection of the specific components of the soil gas to be measured (specific constituents, volatile organic compounds, total organic hydrocarbons) and should it vary for use in release detection versus the cleanup of releases?

The measurement of hydrocarbons, or organic solvents in the soil-gas, soil, and ground-water is a difficult process with the sampling and analytical methods being important factors. Standards are in various stages of development for many aspects of an on-going EPA site characterization study involving the measurement of organics. Soil-gas measurements may be made with a variety of methods some of which will identify individual constituents in a complex mixture of hydrocarbons, e.g., gas chromatographic analysis. Some measurements include methane while others exclude this naturally occurring constituent. Should soil-gas data used to characterize existing contamination at a site be reported in terms of ppm total hydrocarbons, or should some constituents such as methane be reported separately? Should the units be in terms of ppm, or micrograms per cubic meter with respect to methane, benzene or some other standard?

The Agency also seeks information on the sensitivity, and reliability of external leak detection methods for use at previously contaminated sites. How and when can a leak be detected at a site with previous contamination? What levels of contamination will prevent external leak detection methods from being effective in detecting small, slowly developing leaks without an excessive number of false alarms? Data showing the fluctuation of contaminations over time at sites where leaks are not believed to be occurring is specifically requested. Data on the concentrations of organic contaminants in the soil gas, soils, and ground water is solicited for sites where no leakage from the tank system is believed to have occurred. These data will be useful in determining the long-term performance of external leak detection systems in contaminated environments where the sensitivity and response time of the external leak detection system must be assessed in relationship to alternative leak detection systems.

Finally, the Agency specifically requests comment on the applicability of the requirements proposed for vapor monitoring to new hazardous substance UST systems. Are more requirements necessary to assure that the use of this method can be done reliably with different hazardous substances? Do the requirements provide a sufficient standard of performance for UST owners and operators so that they may adequately develop a method that will work at a particular site, given the volatility of the substance stored?
c. Monitoring for Liquids on the Ground Water (Section 280.41(e))

Today's proposal also allows monitoring techniques that are based on detecting the physical presence of released liquids on top of the water table. Under this method, monitoring wells located within the excavation area take advantage of the physical properties of certain regulated substances that cause them to "float" on top of the ground water when released into the underground environment. This method can be used with most petroleum products because they are lighter than and largely immiscible with water, and may be used through a case-by-case variance for other regulated substances that are lighter than and immiscible with water.

Because it is keyed into particular properties of the liquids being stored, monitoring for liquids on the water table can be used for various types and sizes of UST systems. The technique also can be used for UST systems which are partially below the water table if the characteristics of the released liquid will cause it to float on top of the ground water. This method of release detection can be performed either manually or automatically. Three general techniques would be allowed:

- Physical inspection of ground water using a water sampling bailer to detect a visible thin film of product on the water table or to smell the product in the water sample;
- Application of a thin film of paste to a rod or tape which, when lowered into the well, will change color upon exposure to any hydrocarbons on top of the water table; and
- A variety of automatic sensing devices which, after placement in monitoring wells, can be continuously operated to electronically detect the physical presence of hydrocarbons on the ground water.

A major concern with the use of this method is that some soil and ground water will be contaminated before a release is detected. Some of the hundreds of organic compounds comprising gasoline are soluble in water and will dissolve and enter the ground water, including some which could under certain conditions present a risk to human health and the environment (such as benzene, toluene, and xylene in gasoline). This is particularly important because cleanup of an aquifer to drinking water requirements is not possible, as a matter of routine. On the other hand, several states allow the use of ground-water monitoring, reasoning that this method offers rapid and certain detection, if properly applied. In fact, at many sites no other method may work as well as ground-water monitoring to rapidly and assuredly detect leaks from single-walled tank systems. If EPA barred the use of ground-water monitoring, therefore, the effect might be the creation of a de facto class of tanks at some sites where secondary containment would be required. EPA is seeking public comment on this point.

Despite these concerns, however, the Agency has concluded that this method can be applied to detect and minimize releases if it is used within certain prescribed limits which are intended to ensure rapid detection. Therefore, today's proposal provides several important requirements on the use of this method that, when combined with rapid corrective action when a release is detected, is believed to effectively minimize potential adverse impacts to ground water.

The primary limitations on the use of ground-water table monitoring being proposed today are:

- The substance stored is immiscible in water and has a special gravity of less than one;
- The ground water must be in or very near the UST excavation area (never more than 20 feet below the ground surface) and the backfill soils must have a sufficient hydraulic conductivity (not less than 10^-3 cm/sec) to allow the released product to flow freely to the monitoring wells;
- Monitoring equipment or practices must detect at a minimum the physical presence of a release of 0.125 inches of free product pooled on the ground water in the monitoring wells;
- The monitoring wells must be located in the excavation area, and the monitoring well network must be designed to detect a release from any portion of the UST system and be based on an assessment of the conditions immediately surrounding the UST system; and
- All monitoring wells open to outside access must be clearly marked for their purpose and secured from unauthorized entry.

Each of these limitations is discussed in more detail below.

1. The substances stored is immiscible in water and has a specific gravity of less than one (Section 280.41(e)(1)).

Today EPA is proposing to require that ground water table monitoring only be allowed where the substance stored in the UST system is immiscible in water with a specific gravity less than one. This requirement is intended to restrict the use of this method to situations where a release from the UST system of the regulated substance stored will pool on top of the nearby water table (like many of the lighter petroleum substances such as gasoline). A specific gravity of less than water will assure this. The requirement also establishes the general criterion of immiscibility to assure that even small releases will not rapidly dissolve in water so that a sensor located on top of the groundwater table will not be able to detect the presence of the released material.

2. Twenty Foot Depth to Ground Water and Porous Soils (Section 280.41(e)(2)). Today's proposal limits the use of this method of release detection to areas with shallow depths to the water table and porous soil conditions. These requirements are intended to assure that potential impacts to the environment are minimized and that release detection is more certain. Typically, UST excavations extend between 10 to 15 feet below the ground surface. Thus, a release would only have to normally travel between 0 to 30 feet to reach the ground-water table (at 10 to 45 foot depths) and the point of monitoring. While the amount of the release necessary to reach a monitoring well will vary under site-specific conditions, EPA expects in the shallow water and highly conductive soil conditions proposed today that small releases will rapidly reach the monitoring wells, rapid detection will be possible, and corrective action would be relatively simple. The porous soil conditions with at least a 10^-3 cm/sec hydraulic conductivity are also intended to ensure rapid detection. Existing UST systems with proper installation procedures and sand or gravel backfill will be able to meet this condition provided that the soils beneath the UST system have a hydraulic conductivity of at least a 10^-3 cm/sec or more between the UST system and the location of the sensors in the monitoring wells on the water table. This minimum conductivity was selected to ensure that releases do not begin to travel laterally and miss the monitoring points. The above conditions also promote more certainty in detecting a release because they require the point of monitoring to be very close to the UST system and, therefore, assure that there is little potential for interference with rapid detection once a release occurs.

Some industry representatives have recommended in discussions with EPA that the use of the release detection method be allowed at locations with a greater maximum depth to the water table, such as 40 feet. After examining this option, EPA identified two concerns with the use of this method of detection...
at such lower depths to ground water. First, this approach would allow an increase in the amount of release that could occur prior to detection and, thus, an increase in the impacts that could require more extensive corrective action (including the amount of underlying soils contaminated). As depths to ground water increase, there is also an increased concern that a release could travel sideways before reaching ground water due to unknown soil conditions such as a layer of less conductive silts or clays. This could result in the release missing the monitoring wells located beneath the UST until detection of the release (if ever) is even more significant and difficult to correct.

Representatives of one manufacturer of continuous automated ground-water table monitoring equipment have stated to EPA that this equipment is not recommended at locations where depth to ground water exceeds 20 feet. The state of Florida UST program requires that the depth to water table at the time of drilling not exceed 20 feet for this type of monitoring. EPA's proposed requirement reflects the concerns addressed in the paragraphs above and these established approaches, by proposing to limit the use of this method to areas where the seasonal maximum depth to the water table from the ground surface does not exceed 20 feet.

Another approach considered by EPA was to limit the use of this method to areas where ground water is within the excavation area (typically, between 10 to 15 feet from the ground surface to the excavation bottom). This would reduce impacts, possible interferences at greater soil depths, time to detection, and clean-up costs to the minimum possible. This limitation could be particularly important at sites with complex native soil structure that could enhance the flow of leaked product away from, rather than towards, monitors. EPA did not, however, propose limiting this method to excavation area ground table conditions. The Agency does not believe the difference of 5 to 10 feet from the proposed depth of 20 feet would result in contamination that would significantly increase adverse impacts to human health and the environment. In using a seasonal maximum depth to ground water, the Agency expects the distance between the excavation area and the ground water to be negligibly small for detection and cleanup purposes.

Finally, EPA is also concerned that ground-water table monitoring in relatively impermeable soils (or in soil with impermeable layers), or in disturbed soils, could result in a horizontal movement of released product to areas other than where the monitoring wells are located. Today's requirements that such methods be used only in highly conductive soils (for example, sand) is intended to minimize this concern by limiting its use to soils where this potential problem would be unlikely to occur.

(3) Capability of Monitoring Equipment or Practices (Section 280.41(e)(3)). In developing today's proposal, EPA considered the effectiveness of both the manual or automatic ground-water table monitoring techniques. A major constraint in trying to limit these methods to a particular threshold of detectability is the current lack of field experience and performance data on the long term reliability and operating performance of automated equipment. EPA believes that both the manual and automated approaches have certain advantages and disadvantages. For example, manual monitoring relies on the ability and motivation of the owner or operator to properly perform the test at required intervals, and the tests are somewhat qualitative (determined by human sight or smell of the contents in a bailer that pulled a water sample from the observation well). As stated previously in this Preamble, most existing UST systems do not have release detection. Thus, this manual approach would require a significant change in owner and operator behavior. Manual methods do allow inspectors to take their own samples during visits to the site. Continuous, automated systems are subject to failures in proper installation, and maintenance. However, they have the distinct advantage of being continuous and automatic and not subject to the need for routine human attention.

In order to provide flexibility to both the states and the regulated community, while encouraging technology innovation and improvement, EPA has decided to allow both manual and automatic methods under the proposed rule. EPA also has concluded there is a need to limit the performance of both the manual and automated approaches so that small releases will be detected. Manual approaches, whether through physical inspection of monitoring samples for odors or a visual sheen, or the use of detection pastes, are invariably somewhat subjective. However, when the presence of product can be seen or smelled, a release is expected to be small if quick action is taken to correct the problem. Existing field experience with the automated detection devices is limited because they have only recently become available. EPA has no documented test results concerning their performance. However, manufacturers of these devices consistently claim they can detect product on the water table where it is within a thickness of from 1/2 to 1/3 inches. Therefore, EPA is proposing today a requirement that devices used at a minimum be capable of detecting a release measuring 1/4 inch on the ground water. This approach applies to both the use of automated or manual techniques. This level of detection is expected to be achievable using current practices and equipment already available to the regulated community.

(4) Monitoring Well Based on Assessment in the Immediate Vicinity of the UST (Section 280.41(e)(4)). An important factor in the success or failure of the use of the ground-water monitoring method is the number, type, and location of wells that are used. In developing today's proposal, EPA considered requiring detailed design criteria. For example, Florida's requirements specify such criteria as minimum well diameter, well screen location, minimum screen opening size, backfill material, construction material, seal requirements, and cap requirements.

However, EPA has decided not to specify this level of design detail and is instead proposing a general performance standard requiring that the system be designed to detect a release from any portion of the UST system based on an assessment of the area in the immediate vicinity of the UST system (i.e., the excavation area and soils and water table immediately below it). This general approach is intended to provide the states and the regulated community significant flexibility in the design of well systems that allow various location-specific characteristics and local approaches to be considered.

When released liquids reach the water table, their dominant movement is expected to be primarily in the direction of ground-water flow. However, this direction is not often precisely known and is often difficult to determine in developed areas. Therefore, placing several wells on various sides of the UST system will increase the probability of detecting a release quickly. EPA considered requiring a minimum number of wells in various configurations and locations. However, there is no one optimum number and location of wells for all locations and EPA believes a brief assessment will have to be conducted at each location to tailor an approach that suits the conditions in
and immediately below the excavation area. The optimum approach will vary by the size, number, and design of the tank, as well as other site-specific factors (such as the depth to the water table and the type of substance stored). EPA has initiated research concerning the factors that influence proper well network design. EPA intends to publish guidance concerning an approach to determine the proper number, location, and types of wells under various conditions, if water table monitoring wells are allowed under the final rules.

In general, EPA has concluded that all monitoring wells should be located as close as possible to the UST system when using ground-water table monitoring. This is believed to assure the fastest and most certain detection of releases. Thus, today EPA is proposing that all monitoring wells must be located close enough to the UST system to be within or through the UST excavation area. Because EPA believes that the predominant flow of a release under the conditions specified today will be directly down to the water table, and well location through the excavation area will assure that the placement of monitoring points will be as close as possible to the pooled release.

(5) Marking Monitoring Wells and Securing Them From Tampering (Section 280.41(e)(5)). Today’s proposal for monitoring liquids on the ground water requires that monitoring wells be located in the excavation area. As was discussed for vapor monitoring, EPA believes that the owner and operator must take steps to make sure all such wells are of different designs than product fill ports or otherwise clearly marked and closed to unauthorized outside access. Today’s proposal requires that these simple, prudent steps be taken at all monitoring wells.

(6) Issues for Public Comment. EPA is seeking public comment and performance-related information regarding the use of liquid monitoring on the water table. EPA is particularly interested in receiving comment on the appropriateness of the requirements proposed for the use of this method of release detection. The Agency is also interested in receiving information on the design and use of this method in the field, particularly the likelihood of ambiguous or false detection results that are the result of previous contamination. Comments on whether specific techniques of ground-water table monitoring, or the method itself should be allowed, are also solicited; particularly in drinking water aquifer locations.

d. Monitoring for Releases in an Interception Barrier (Section 280.41(f)(1))

Interception barriers are generally basin-shaped impermeable liners installed beneath the UST system to intercept downward-migrating releases and direct them to a monitoring well. These barriers have no walls and only offer partial containment of releases. Interception barriers are generally for use in regions where ground water will not normally reach them. They are often constructed of compacted natural clays, cement, soil-cement mixtures, or of synthetic materials. Today’s proposal allows the use of interception barriers as a way of enhancing the capability of a detection device to intercept and detect a release from any portion of the UST system.

Because this method of monitoring enhancement is often used with only one monitoring well, it is important that the interception barrier properly intercept and direct releases to this single monitoring point. A faulty design or installation that does not catch a release; a crack or hole in the barrier; or improper routing of the release to the monitoring well are examples of ways this simple release detection enhancement scheme can potentially be undermined. Because there are other possible problems with this method of release detection, the Agency considered not allowing it. However, it is allowed in at least three states (California, New York, and Kansas), and the Agency has concluded that it can provide adequate release detection at UST systems if certain limitations are met. Therefore, today’s proposal includes this method subject to certain requirements that must be met before it can be used at a particular UST system. The requirements on the use of interception barriers that have been proposed today include:

- The interception barrier must be sufficiently thick and impermeable to ensure interception and detection of a release from the UST system;
- It must be designed to intercept any release and ensure its detection in the monitoring well;
- It must be compatible with the substance stored so as to not deteriorate in the presence of the released product;
- Soil moisture or rainfall must not render the monitoring method used ineffective for release detection purposes for more than 30 days;
- The barrier must always be above the highest historical ground-water level and not in a 25-year flood plain, unless the barrier and monitoring designs are intended to still operate under such conditions; and

- Monitoring wells must be clearly marked (or of a different design) and closed to unauthorized outside access and tampering.

These limitations are discussed in more detail below.

(1) Impermeable Barrier (Section 280.41(f)(1)). Today’s proposal allows the use of interception barriers only if they are sufficiently thick and impermeable to permit interception and detection of releases. This limitation is intended to ensure that the barrier is, in fact, an obstacle to the downward migration of a release; and that the barrier would cause the release to accumulate and make contact with the barrier’s detection device. Natural clays must have at least a 1 x 10^{-10} cm/sec impermeability. This value was chosen on the basis that a release would not be able to traverse a two-foot thickness of such material in one month’s time. (This is a typical minimum thickness that can be easily spread and compacted by hand on the bottom of an excavation area.) Also, artificial liners and cements must be of sufficient thickness to avoid cracking and splitting due to settling or other underground pressures.

(2) Intercept and Detect Releases (Section 280.41(f)(2)). Another general limitation to the use of interception barriers is that they must be designed to intercept all releases and ensure they are directed to the monitoring well. Because a release must be captured by the barrier and directed to the monitoring well before it can be detected, the design and construction of the barrier is important for the release detection to work. The barrier must be large enough to catch all releases and must not settle, warp, or otherwise deteriorate so that the release is misdirected away from the monitoring well.

There are no codes or recommended practices available concerning the design and construction of barriers. Therefore, EPA is proposing a performance standard for the design and construction of the barrier which must be met by the owner and operator utilizing this method. The barrier performs the function of enhancing the performance of the monitoring well(s) and thereby forges the need for several monitoring wells that follow a careful network design around the UST.

(3) Barrier Compatibility (Section 280.41(f)(3)). Whatever type and design of barrier is used, it is important that it be compatible with the substances stored in the UST. Small spills or releases cannot be allowed to undermine the integrity of the barrier because of the critical function it
performs in detecting releases. If the integrity of the barrier is undermined in any way by released product so that it will deteriorate and not deter a release for detection, the UST will no longer be equipped with reliable release detection. (4) Soil Moisture, Rainfall, and Ground-Water Level (Section 280.41(f) (4)–(5)). The presence of water, from whatever source, within the interception barrier can undermine the monitoring device's ability to detect releases. Some barriers are designed to act as a bathtub and the monitoring is designed to take place on top of the captured water within the "wet" barrier. Other systems are so-called "dry" detection methods because they depend on the detection of released fluids within the low area (sump) of the barrier and pooled water can hinder the accuracy of this determination. Thus, this proposed general performance standard requires that the UST owner and operator consider possible interferences that could overcome the effectiveness of the barrier's detection technique, including a rising water table that overtakes the monitoring well's location within the barrier or a surface water saturation event in a flood-prone area (e.g., a 25-year flood plain) that could inhibit the detection of a release for more than 30 days.

5 Marking Monitoring Wells and Securing Them from Tampering (Section 280.41(f)(6)). Today's proposal could result in a monitoring well in the excavation area that is open to aboveground, outside access. For the same reasons as discussed under other methods, these wells must be clearly marked and secured from unauthorized access and tampering. (6) Issues for Public Comment. EPA solicits comment and information concerning the performance of interception barriers, particularly their efficacy in detaining and directing releases reliably to ensure their detection. EPA specifically requests comments and information concerning the proper design and use of such barriers, for example, the use of "dry" as contrasted to "wet" sump techniques of release detection. Also, the Agency requests comment concerning the 1 × 10^{-4} cm/sec permeability requirement. EPA is concerned that small releases may not be intercepted and directed to the monitoring point by this type of barrier.

e. Automatic Monitoring of Product Level and Automatic Inventory Reconciliation (Section 280.41(g))

Automatic product level monitoring and automatic inventory reconciliation are two methods of release detection that rely on measurement of product volume in the tank. In product level monitoring, the product level in the tank is measured several times during a period when there are no product inputs or withdrawals. A consistent drop in product level over a several hour period can indicate a release from the tank. In the second method, automatic inventory reconciliation, the operator reconciles product deliveries, withdrawals and inventory each day to identify shortages. A large shortage in a single day or small, persistent shortages over a month can indicate a release of product. Today's proposal allows the combined use of automatic product level monitoring and automatic inventory reconciliation to detect releases. Automatic product level monitoring requires measurement of small changes in product height, as little as 0.001 inches. In addition, small changes in product temperature must also be measured to accurately compensate for temperature-induced changes in the product volume. Several level sensing systems are available for UST systems and are claimed by vendors of these devices to detect release rates of 0.2 gallons per hour. Although there is little documented performance data for these systems, the sensitivity of these devices is expected to be extremely good in most situations. In fact, some manufacturers claim that their systems reliably detect release rates of 0.1 gallons per hour. There are EPA studies in progress that are evaluating the performance of these automatic level sensing systems.

Automatic inventory reconciliation requires that the product inputs, withdrawals and the stored volumes are reconciled daily for an extended period of time. Many of the errors associated with these measurements are random and a loss trend that is smaller than the typical measurement error can be detected by analyzing many daily losses as a group. For many years, manual methods have been an industry-recommended practice for detecting losses due to both theft and tank system leaks and is widely practiced. Generally, automatic inventory reconciliation requires significantly less diligence on the part of the operator to ensure consistent and accurate inventory computations.

There are several major concerns with the use of either automatic product level monitoring or automatic inventory reconciliation as release detection methods. Similar to tank tightness testing, there is a lack of performance data for product level measuring systems. Also, the product level monitors detect releases from the tank only, and do not sense losses from the pipe system. Although significantly less than manual methods, some automatic inventory reconciliation equipment involve considerable operator involvement, and with it, opportunity for human error. The Agency considered not allowing the use of either of these methods because of these major issues. However, EPA believes that these methods may be usefully applied in a manner that will detect releases if they comply with certain performance requirements.

Today's proposal provides several important requirements concerning the use of these methods that, when combined with any necessary corrective action when a release is detected, are believed to effectively minimize potential adverse impacts on ground water.

Today's proposed requirements on the use of automatic product level monitoring (section 280.41(g)) are that the test be conducted at least once every 30 days when the tank is at least 80 percent full, and is capable of detecting a 0.5 gallon per hour leak rate with a probability of detection of 0.98 and a probability of false alarm of 0.01. Proposed requirements for the use of automatic inventory reconciliation are the same requirements proposed for inventory reconciliation used with tank tightness testing, except that inventory measurement must be done automatically:

- Inventory reconciliation controls must include reconciliation of inputs, withdrawals, and stored inventory each operating day so that a release greater than 5 percent of flow through on a weekly basis or 0.5 percent of flow through on a monthly basis will be detected;
- The height of the stored inventory must be automatically measured to a 0.125 inch accuracy;
- Inputs must be reconciled with delivery receipts by measurement of tank inventory prior to and after delivery;
- Deliveries must be made through a drop tube and;
- The product dispensing must be metered and recorded with an accuracy of 5 cubic inches for every 5 gallons of petroleum withdrawn.

These proposed requirements are discussed in more detail below.

(1) Use of Both Methods Together. Today's proposal requires that both automatic product level monitoring and automatic inventory reconciliation be used in combination. As previously mentioned, EPA has concerns about the performance of either of these methods...
used alone. Product level monitoring generally can only be used to detect losses from the tank, so another method of release detection must be used for the piping system. Second, the performance claims of the product level monitoring system manufacturers have not been confirmed through independent testing nor is the reliability of these systems exactly known. Vendors of these devices do not commonly claim that product level monitoring can be done with the same effectiveness as tank precision tightness testing. Although testing and evaluation programs are in progress, EPA has concluded that it is prudent in this situation to require a second, redundant method (automatic inventory reconciliation) that is generally available using the same equipment to increase confidence that releases will be detected. Third, as with precision testing, automatic product level monitoring cannot be conducted on a continuous basis because inputs and withdrawals interfere with the test results. Often stations operate 24 hours a day, 7 days a week and must schedule monitoring periods. In such situations, automatic inventory reconciliation provides more frequent release detection. Conversely, the Agency is concerned that automatic inventory reconciliation, used alone, still may not provide adequate release detection because it may be subject to considerable error. EPA believes that requiring these automatic techniques to be used in combination increases confidence that releases will be detected, and that the incremental costs will be small because several level sensing systems are available that can perform both tank level sensing and inventory reconciliation operations.

2) Level Monitoring Requirements (Section 280.41[9](1)). Today's proposal requires that product level monitoring must be conducted at least every 30 days. As mentioned above, some stations are operated continuously and therefore their operators will have to schedule product level monitoring periods. Other stations close for a period each night, but the tank may not always be 80 percent full at night. The Agency considered requiring more frequent product level monitoring, but this is believed to be unnecessary if inventory is monitored daily. Another consideration is that owners and operators would have some difficulty scheduling more frequent tests, even if done automatically.

Today's proposal also requires that the tank be at least 80 percent full during the test because this ensures that more of the tank surface is checked for releases. The Agency considered requiring the tank to be completely full, but decided that would make the performance of the test unnecessarily difficult for the regulated community to achieve. Tanks are routinely used at below 80 percent capacity most of the time during one time. Also, because this is a minimum requirement, the Agency expects the test will sometimes be conducted at full tank capacity.

Today's proposal requires that product level monitoring be conducted to detect a 0.2 gallon per hour leak rate, with a probability of detection of 0.99 and a probability of false alarms of 0.01. The 0.2 gallon standard is based on manufacturers' performance claims. As previously mentioned, the Agency is not aware of independent performance data for these systems.

The Agency chose this performance standard because it believes that it will challenge the manufacturers to prove that their systems can meet the standard and thereby will result in the approved use of these systems. EPA recognizes that the currently available systems may not provide adequate performance on tanks larger than 12,000 gallons.

The Agency's testing evaluation program in our Edison, New Jersey laboratory will soon be evaluating some of this equipment more closely. Should new information reveal that automatic product level monitoring is as effective as precision tank testing, this equipment may be held in the final rule to the same standard proposed today for tank tightness testing. The requirements proposed today for automatic product level monitoring are intended to hold users of these devices to the maximum performance described as achievable by their vendors. Therefore, while the proposal holds this equipment to a higher threshold rate than tank tightness testing, it is otherwise being held to the same probability of detection and false alarm.

3) Inventory Reconciliation Requirements (Section 280.41[9](2)). Today's proposal sets the same requirements for inventory control and reconciliation as when it is required in combination with tank tightness testing, except that it must be performed using the same automatic equipment used for the monthly product level monitoring. (See the discussion of inventory controls in Section V.D.3.a. of this Preamble for details concerning these requirements.) This equipment can generally be used for both purposes and today's proposal requires that they be used in combination (in order for it to satisfy today's requirements for release detection).

Although the performance of automatic inventory control and reconciliation has not been quantified, it is not yet believed to be sufficiently accurate to meet the performance standard of 0.1 gallons per hour required for the precision tightness test discussed earlier in this section of the Preamble. Therefore, it is not presented as a separate testing alternative in this proposal, unless it is used in combination with semi-annual tightness testing or monthly automatic product level checks. EPA, however, may accept automatic inventory reconciliation alone as a viable alternative release detection method in the final rule should it be demonstrated to meet the tank tightness test standard. The Agency solicits comment and performance information concerning the use of this method for release detection purposes.

f. Interstitial Monitoring Between the UST and a Secondary Barrier (Section 260.41(h))

Interstitial monitoring is a method of detecting releases in the space between the UST and a secondary barrier. It is believed to be reliable, easy to use, and the least expensive release detection system to operate once the secondary barrier is provided. Today's proposal allows the use of interstitial monitoring techniques that sample automatically or manually in the space between double-walled tanks and piping systems or single walled tanks and piping surrounded by an excavation liner.

The appropriate use of interstitial monitoring techniques varies with the design of secondary barrier used. The most common methods include either the use of concrete vaults, double-walled tanks and pipes, and synthetic flexible membrane or clay liners in the UST excavation area. Most of the various sensors associated with the liquid and vapor monitoring methods previously discussed for the other methods of release detection can be used within the secondary barrier. In many cases only one monitor is necessary because all releases are contained and, thus, more easily detected by a single sensor.

As with the case of other methods of release detection, there is little performance data concerning the use of the various techniques of interstitial monitoring within the interstitial area between the UST system and the various types of secondary barriers surrounding it. Although this method is commonly perceived to be the most reliable form of release detection, an important concern with the various techniques of interstitial detection is...
their improper use (e.g., the careless design, location, operation, and maintenance of the detection sensor or secondary barrier). When improperly used, these systems could result in false alarms or fail to detect releases but still provide a false sense of security concerning the UST system's integrity, the method's ability to detect releases, and the containment of releases. Another concern is ensuring the integrity of the secondary barrier so that releases do not escape detection by the single monitoring sensor. Today's proposal establishes several requirements concerning the use of secondary barriers and interstitial monitoring that are intended to ensure that it is effective in detecting releases. These limitations are:

- The design construction and installation of the secondary barrier must assure detection of any release from the UST system.
- Double-walled UST systems must use monitoring that is capable of detecting any breach in the inner wall; UST systems with a secondary barrier/liner within the excavation must use monitoring that is capable of detecting any release into the interstitial area:
  - The secondary barrier must be sufficiently impermeable to permit containment and detection of a release;
  - The secondary barrier is compatible with the regulated substance stored;
  - The secondary barrier must be above ground water and not used in a 25-year flood plain unless the design specifically allows for these conditions, and must be compatible with the substance stored;
  - The monitoring device must not be rendered incapable of detecting releases due to changes in soil moisture conditions or rainfall events;
  - All monitoring wells open to outside access must be clearly marked for their purpose and secured from unauthorized entry.
- UST systems with internally-fitted membrane liners must use an automated device that can detect when the integrity of the tank is breached, and the liner must be compatible with the substance stored; and
- Tanks provided with interstitial monitoring must also have release detection for all attached underground piping and equipment.

Each of these limitations is discussed in more detail below.

1) Must Be Designed, Constructed and Installed To Assure Detection of Any Releases (Section 280.41(h)(1)). The general performance standards approach that EPA is proposing today in § 280.40(h) for secondary barriers with interstitial monitoring is intended to enable tank owners and operators to follow any available industry codes and accepted engineering practices in establishing these secondary barriers. The industry consensus codes are, in fact, already now being followed for many of the new double-walled UST installations. Today's proposal in 280.40(h)(1) is intended to permit flexibility in the choice of secondary barriers and interstitial monitoring techniques that can be used. Some of the secondary containment barriers that can be used are double-walled tanks and pipes, concrete vaults, synthetic flexible membrane liners, and compacted or treated clay soils.

Existing consensus codes and recommended industry practices do not yet exist on a wide-spread basis for the use of secondary containment at UST systems. Today EPA is not proposing detailed design and construction standards in this area. The rapid development of numerous technologies at the national level precluded EPA proposal at detailed design standards. Instead, the owner and operator should consult with the UST system installer to determine which form of secondary containment is appropriate for the site and will assure releases are detected. For example, the Steel Tank Institutes "Standard for Dual Wall Underground Storage Tanks" can be used as guidance for meeting this requirement. In addition, United Laboratories is developing testing standards for the listing of flexible membrane linear systems for UST excavation applications that also can be used to assure compliance with this proposed performance standard. However, for many of the choices of secondary barriers the owner and operator will need to consult the guidance of a trained and experienced engineer familiar with accepted engineering practices in this area.

2) Must Detect Breaches in the Inner Wall of a Double-Walled UST System (Section 280.41(h)(2)). A variety of interstitial detection techniques are allowed within the double-walled systems. The only limitations EPA is proposing today on the use is that they be able to detect a breach in the inner wall. Thus, the Agency is not requiring detection of breaches in the outer wall unless they can interfere with the detection of actual releases through the inner wall.

The techniques of monitoring for pressure or liquid level changes within the interstitial area would be activated by a failure of the outer wall but, in this condition, it is unable to detect if there is a breach in the inner wall (or whether an actual release is occurring). Therefore, under today's proposed limitation for double-walled UST systems, when a pressure monitor is being used, the owner and operator would have to assure that breach in the outer wall are immediately repaired so that release detection compatibility is maintained. Similarly, if the inner wall fails it must also be immediately repaired, or the tank system component replaced, because under this condition the pressure monitor system would no longer be able to ascertain whether a release to the environment was occurring.

3) Secondary Barriers Within the Excavation Area Must Be Able To Detect Any Release Between the UST System and the Barrier (Section 280.41(h)(3)). Under specific circumstances, secondary barriers that surround an UST system in the excavation area (vaults, clay walls, or membrane liners) may not facilitate the detection of releases. Today, EPA is proposing some general limitations that would not allow the use of secondary barriers that are not sufficiently thick or impermeable to assure containment and detection of releases. Natural or artificial liners should not be used in the excavation area where site conditions could render them useless for release detection purposes. For example, flood waters or high ground water could invade the interstitial area and render the release detection sensors useless. Likewise, under certain conditions the associated pressure gradients could force a substantial breach in an inadequately designed secondary barrier, thereby providing a pathway for a future release to go undetected through the barrier after the return to low water conditions. Today's performance standard is intended to require avoidance of all the above conditions that could render release detection monitoring incapable of detecting releases. There are, however, barriers that can be engineered to work well in high water saturation conditions. In these instances, the barrier is filled deliberately (partially or fully) with water and the monitoring takes place on the water surface. Today's proposal does not allow the use of such designs. Both natural and artificial barriers that are incompatible with substances stored are prohibited because such incompatibility can weaken and ultimately breach the barrier's design. This could render them useless in containing a release sufficiently for detection purposes.
Secondary barriers that surround a UST system in the excavation area (vaults, clay walls, or membrane liners) can also trap moisture, rainfall, or flood waters to such an extent that the vapor or liquid monitoring device is rendered completely inoperative for release detection purposes. EPA is today proposing a general performance standard that requires the owner and operator to ensure that the monitoring technique used will not be rendered inoperative by these conditions on-site for more than 30 days.

There are two basic ways of meeting this limitation. First, an impermeable cap can be provided over the top of the secondary barrier system, thereby preventing rainfall and soil moisture from entering and pooling within the interstitial monitoring area. Second, equipment could be provided for periodically pumping out moisture that becomes trapped within the secondary barrier system, thereby maintaining the system's design for release detection. For reasons already discussed above concerning other release detection methods using monitoring wells, all wells must be clearly marked and closed to unauthorized outside access.

(4) Internally-Fitted Membrane Liners (Section 280.41(h)(4)). EPA is aware of an interstitial monitoring technique within internally-fitted membrane liners that is currently available on a very limited basis in the United States. This technique has been widely used in West Germany for a number of years (primarily for diesel fuel storage). It consists of internally fitting a membrane liner into the inside of the tank and monitoring the space between using a device that maintains a partial vacuum pressure in the interstitial space. EPA has today proposed to allow the use of this type of monitoring technology, using those designs that are activated when the integrity of the tank is breached. Because the tank itself provides the structural support to the liner, a breach in the tank indicates a weakening of that support and a potential release. Also, once the vacuum is broken, and the interstitial monitor is activated, it will no longer be able to detect future releases. Thus, the tank would have to be replaced or repaired for the release detection to operate again. A breach in the membrane would also break the vacuum and cause the need for its immediate repair.

Today, EPA is also proposing the limitation that an internally-fitted membrane be compatible with the substance stored. Incompatible materials could render the membrane, and the release detection system associated with it, useless overtime.

(5) Release Detection for the Piping (Section 280.42). The final requirement proposed today for interstitial monitoring is that release detection be provided for the underground piping and equipment. Double-walled tanks and internally fitted membranes do not address release detection for piping. Other secondary barrier designs likewise do not always include piping. This requirement makes it clear that owners and operators must provide interstitial or some other type of monitoring for the underground piping and equipment attached to the tank that meets the requirements of one of the other methods of detection proposed today.

(6) Issues for Public Comment. EPA is seeking public comment and information on the reliability and effectiveness of various interstitial monitoring techniques, particularly as they are used with the different secondary containment designs. Specific comments are requested concerning the appropriateness of the limitations proposed today in ensuring that releases from UST systems will be detected.

EPA is particularly interested in comments regarding today's performance standard for liner systems in the excavation area. The Agency is concerned that, in the absence of detailed performance standards, some liners may not perform adequately. It has been reported to EPA in the past that field-seamed flexible membrane liners frequently leak. In addition, in the absence of a permeability standard, clay liners may not be sufficiently impermeable to intercept and direct a release to the monitoring point. Comment is requested regarding experience with performance and dependability of liner systems. In addition, EPA requests comment on performance standard that could be applied to liners and other types of secondary containment for the purpose of enhancing the success of release detection.

g. Other Methods Approved by the Implementing Agency (Section 280.41(i))

As previously described, today's proposal identifies requirements and general standards of performance for several basic methods of release detection for new UST systems. However, many other techniques and devices are under development in this rapidly growing field. EPA has identified over 250 devices being commercially developed. Some methods, other than the six general ones proposed, today may also be able to successfully detect releases within varying circumstances and limits. Therefore, in 280.41(i), EPA is also proposing to allow the use of other methods, or combinations of methods, of release detection that can be shown to reliably detect releases in a manner which is no less stringent than one of the allowed methods described above.

Many different methods of release detection are under development or already available. There are numerous in-tank non-volumetric monitoring devices (for example, helium gas tracer monitoring) under investigation; several devices for use in the physical or electronic measurement for the presence of liquids or vapors in the excavation area's soil (for example, U-tubes and soil resistivity sensors); numerous products for use in completely wrapping tanks to enhance release detection; and relatively sophisticated devices reported to detect small volume releases from pressurized pipes. EPA has not evaluated the performance of all these methods and, as described earlier, has rejected a regulatory approach towards release detection that would require certification of these methods or devices in regulation before they can be used.

A major concern with these other varous methods, however, is whether they perform adequately or only work properly under specific conditions. One alternative that the Agency considered was simply to not allow any of these other methods, thereby restricting the use of release detection to those methods proposed today. This was rejected, however, because EPA believes that other methods, or combinations of methods, may be shown in the future to reliably detect releases. The Agency's intent is to foster continued experimentation, development, and use of other methods that can detect releases from UST systems at least as successfully as those specified today.

To further ensure that other methods, or combinations of methods, can be used if they are shown to reliably detect releases, today's proposal allows their use if they are approved by the implementing agency. To be approved, they must be shown to perform as capably as any of the other proposed methods of detecting releases before they migrate beyond the UST excavation area and result in adverse impacts to human health and the environment. These approvals may be site-specific or more generic, depending on the performance and limitations of the methods. For example, there are some sophisticated pipeline release detection devices available and under development that may be able to reliably detect small releases from pressurized pipes. Such devices, used with appropriate release detection for
the UST may constitute a combination of methods that would be allowed by the implementing agency. EPA is presently collecting information and conducting research addressed to various methods of release detection. Should the Agency finalize the regulatory approach proposed today, the results of these research efforts may be provided in guidance that should be helpful to implementing agencies in deciding whether other methods of release detection should be allowed. These guidelines would identify criteria to be considered in judging any additional methods and their performance in comparison to these six methods proposed today.

The Agency solicits public comment and performance information concerning other methods of release detection that may be capable of detecting releases from UST systems. Information concerning the accuracy and reliability of pressurized line leak detection devices is specifically requested along with public comment on whether they should be allowed in lieu of other methods of release detection for this type of piping. Comments are specifically requested concerning the feasibility of allowing the use of other methods or release detection if they are approved by the implementing agency to be no less stringent than any one of the six methods identified today.

4. Secondary Containment For New Hazardous Substance UST Systems (Section 280.41(b))

a. Overview

As discussed in the previous section, EPA is today proposing several methods of release detection for new UST systems. However, the Agency is concerned that releases of various hazardous substances can be more difficult to reliably detect than petroleum releases. Releases of hazardous substances may not be detected by some or all of the methods allowed for petroleum because most of these techniques and devices have apparently not been designed or calibrated to detect hazardous substances. In many instances, they may never have been previously used for this purpose. In contrast, the Agency has concluded that interstitial monitoring between the UST system and a secondary barrier surrounding it is a method that should be readily available for use in the detection of hazardous substance releases. As discussed previously, there are a number of approaches to secondary barriers for UST systems including vaults, double-walled tanks, and liners. The secondary barrier outside of the UST system prevents the movement of released material into the environment and enables the use of various interstitial monitoring techniques for detecting a release between this barrier and the UST system. These barriers should be readily available for use with hazardous substances.

Today EPA is also proposing § 280.41(b) to require the use of secondary containment/interstitial monitoring at all new hazardous substance UST systems. The Agency believes that a secondary barrier provides a more controlled environment, free of many of the factors that can reduce the probability of detection of some hazardous substances when other methods of release detection are used. A properly constructed and designed secondary barrier will ensure retention of a release for detection so that corrective action can be taken under Subparts F and G of the regulations (which includes free product removal and soil and ground-water cleanup). An added benefit of the secondary barrier will be to simplify the cleanup of releases from the tank system. Only a limited area can be contaminated if the secondary barrier retains the release for purposes of reliable detection and corrective action. This is a significant benefit for some highly mobile, highly soluble, or high specific gravity hazardous substances, which are difficult to remove from the soil or ground water and pose an inherently higher level of risk to human health when coupled with unreliable release detection.

There are several interstitial monitoring techniques that can be used to detect releases of hazardous substances in the interstitial area between an UST system and the secondary barrier surrounding it. These detection devices typically detect or monitor for the presence of either vapors or liquids and can operate either continuously or manually. Manual liquid detection systems come in a variety of designs. A number of these use chemical sensitive pastes that change color when exposed to water or hydrocarbons. Some of the continuous liquid detection systems trigger an alarm by using a device that softens or dissolves if liquid (water or hydrocarbons) appears in the interstitial space. Other types of continuous liquid detection systems use level gauges or switches to set off alarms when the liquid rises to the detection level. In all of these liquid detection systems, the sampling point is usually at the lowest point in the secondary containment structure with all areas having free drainage to this point. This interstitial area must also be sealed off from the outside environment to prevent corrosion condensation or precipitation-induced interferences to the monitoring techniques.

Most vapor sensors used for monitoring the interstitial space are continuously in operation and can be used with volatile hazardous substances. However, some manual detectors that are marketed principally as personnel safety devices may also be used. These continuous interstitial monitoring techniques are activated when the concentration of hydrocarbon vapors exceeds a preset level. The preset level is set above the background level at the time of installation. Because of the confined nature of the space between the UST system and the secondary barrier, hydrocarbon vapors from a hazardous substance release are generally expected to reach the alarm quickly.

In addition to these monitoring methods, the interstitial space between the two walls of double-walled hazardous substance UST systems can be monitored using pressure sensors. The pressure systems use either a vacuum or a pressure sensing device in the interstitial space to detect failure of the inner or the outer walls. Loss of the vacuum or pressure signifies a breach in one of the two walls.

b. Current Practices

Four states (CA, DE, RI, SC) and Puerto Rico utilize secondary containment barriers for hazardous substance UST systems. California and Puerto Rico require them for new UST systems. South Carolina requires them only in ground-water sensitive areas (aquifer recharge or drinking water well zones). Rhode Island allows them as an alternative to leak monitoring.

In all the above states, double-wall UST systems are accepted as meeting requirements for new hazardous substance UST systems. In general, they state specifications for construction or approve the tanks on a case-by-case basis. For example, the outer jacket of a double-walled tank must be constructed of coated steel and cover at least the lower 65 percent of the circumference of the tank, and no penetrations through the jacket may be present other than manholes and fittings.

Three states (CA, DE, and RI) address requirements for vaults used as secondary barriers for hazardous materials. Specifications for construction of vaults is generally not given. Some states require visual observation of tanks in vaults as a leak detection method. This requirement implies a necessity for access to the
Monitoring (Section 280.41(h)).

for Secondary Containment/Interstitial Monitoring be required for underground hazardous waste tank systems. The secondary containment barrier must prevent the migration of a release into the soil, groundwater, or surface water and must meet several design, installation, and operation criteria concerning the type of containment, capacity, material selection, foundation support, release collection, and sealing from infiltration of surface or ground water. A registered professional engineer must attest that the tank system design is adequate, and an independent installation inspector or professional engineer must inspect the tank system for adequate construction and installation. Monitoring must be provided between the primary and secondary containment structures to detect releases from the primary containment within 24 hours.

c. Approach to Regulation

EPA is today proposing in §280.41(b) that secondary barriers with interstitial monitoring be required for all new UST systems storing hazardous substances. EPA is also proposing to allow the owner and operator to use an alternative method of detection if it can be demonstrated to accurately and reliably detect releases from the UST. Owners and operators must provide a demonstration of the applicability of any of the other methods to the implementing agency for approval prior to its use. (A more detailed discussion of this alternative demonstration immediately follows in the next section of the preamble.)

(1) General Performance Standards for Secondary Containment/Interstitial Monitoring (Section 280.41(h)). The Agency is aware that the performance and durability of the many types of secondary containment barriers and interstitial monitoring techniques is unknown. New hazardous substances UST systems must therefore meet the performance requirements of §280.41(h)). Many of these interstitial monitoring systems have been in use for only a short period of time at a limited number of sites. Of particular concern to the Agency is the use of synthetic membrane liners wrapped around and in immediate contact with the tank. This type of liner system could subject to greater stresses during installation than a typical liner system which has coarse-grained backfill between the liner and the tank. The increased stresses could result from friction among the tank, liner, and backfill, while placing the tank and compacting the backfill. These stresses could result in tears that allow the escape of releases prior to detection. Another containment technology that the Agency is concerned about is the bentonite clay barriers. Certain hazardous substances may be incompatible with bentonite clays and may not be effectively retained. Also, such sealed-soils have been found by the Agency under its hazardous waste program to perform significantly less effectively than man-made flexible membrane liners, for example. (See today's solicitation of information and public comment on this subject in the previous section of this preamble addressed to interstitial monitoring).

The Agency is today requesting information and comment on the applicability of the various secondary barrier methods and interstitial monitoring techniques to UST systems that contain hazardous substances.

(2) Variance from Secondary Containment/Interstitial Monitoring Requirements for New/Upgraded Hazardous Substance UST Systems (Section 280.41(b)). (a) Overview. EPA recognizes that secondary containment with interstitial monitoring may not be necessary for all hazardous substance tanks to protect human health and the environment, and that there may be alternative release detection methods that protect human health and the environment based on the tank system characteristics, location, and stored substance.

At present, there is an extensive and rapidly growing universe of release detection methods for petroleum substances. The Agency believes that, for hazardous substances which are similar to petroleum substances, some of the release detection methods currently available may be able to provide a similar level of protection. Further, new release detection methods may be developed in the future which will provide this level of protection for other hazardous substances.

Generally, there are two procedures through which variances can be obtained: (1) They can be specified in regulations and thus be self-implementing; or (2) they can be granted through a review and approval process. However, EPA is concerned that the large size of this regulated community poses unique challenges concerning variance implementation. For example, if the Agency selects a self-implementing system, it is possible for abuses to occur. On the other hand, the review and approval oversight process for implementing variances could be logistically overwhelming. (b) Current Practices. Of the few states that do regulate hazardous substances, most allow tank owners to apply for variances based on equivalent technologies. For example, Rhode Island will consider variances from program requirements (and does not require secondary containment) if there is clear and convincing evidence that an "alternative design or operating standard is substantially equivalent to the regulation and will have no adverse effect on public health and the environment." California regulations allow categorical and site-specific variance requests. Categorical variances allow an alternative method of construction or monitoring which is applicable to more than one local agency jurisdiction. Site-specific variances would be applicable at one or more sites within one local agency's jurisdiction. Most states grant variances through a review and approval process.

EPA recently promulgated regulations for hazardous waste storage and treatment tank systems. They contain variance procedures for tanks storing hazardous wastes. The regulations basically require phased-in secondary containment with interstitial monitoring for underground tank systems. These regulations allow both a risk-based variance and a technology-based variance. The risk-based variance can be obtained if the "owner/operator demonstrates that there will be no substantial present or potential hazard to human health or the environment in the event hazardous waste is released from the storage or treatment system." It is not available for new underground hazardous waste tank systems. The technology-based variance can be obtained if the "owner/operator can demonstrate to the Regional Administrator that alternative design and operating practices, together with location characteristics will prevent the migration of any hazardous waste or hazardous waste constituents into the ground water or surface water at least as effectively as secondary containment with interstitial monitoring." "This type of variance would be granted, for example, if a release detection method not believed generally reliable will be reliable for a tank system because of its characteristics, location, and other factors such as the wastes stored or treated." However, variances based on ground water monitoring is not allowed because the overall strategy for regulating hazardous waste tank systems is based on the prevention of contamination of ground water by releases from tank systems.
(c) Approaches to Regulation. EPA has considered two basic approaches for granting variances for hazardous substance tanks: A chemical class approach and a tank system-specific approach. Through the class approach, the Agency would define groups of hazardous substances that would not require secondary containment when stored in underground tanks. The tank system-specific approach would grant variances by taking into account tank contents and siting considerations. In either case the variance would waive secondary containment requirements if an alternative release detection system design and operating practices applied to a protected single-walled tank can be shown to provide reliable protection of human health and the environment.

(i) Chemical Class Approach. The Agency examined various ways to create classes of hazardous substances for which a variance could be obtained. For example, a report prepared for EPA entitled Evaluation of Grouping Methodologies Based on Regulated Substances Properties investigated the feasibility of classifying the regulated substances based on their physical and chemical properties for the purpose of setting different design standards. This report concluded that, while all of the methods considered did to some degree distinguish between potential impacts of different regulated substances, the relative differences in the results were not significant enough to confidently define groups of substances for different tank standards. The report further pointed out that the currently weak understanding of some basic transport processes (e.g., movement of liquids and vapors in the vadose zone) and key data deficiencies (e.g., a uniform scale of toxicity values) decreased the confidence in the results.

A feasibility study prepared for EPA, entitled Risk-Based Ranking of Chemicals in UST Systems, investigated the use of a preliminary scoring technique in which the chronic toxicity characteristics used to establish the reportable quantity (RQ) levels under CERCLA were used to rank the chemicals stored in underground tanks. Then a panel of scientists used this information and additional information pertaining to the potential fate of these chemicals to sort them into categories of high, moderate, and low concern. The report found that chemicals stored in underground tanks vary substantially in terms of risk. Some concerns have been raised about this method (1) that toxicity characteristics used to set RQs were developed to address spills and emergency releases rather than the long-term, low-level continuous releases anticipated from underground tank systems; (2) environmental fate parameters considered did not address the role of biodegradation; and (3) environmental fate of compounds stored in underground tanks is likely to be not only site-dependent, but also solvent-dependent.

The Agency also considered various criteria which could be used to identify groups of hazardous substances which might require less stringent tank standards. The criteria included (1) detection of the substance by vapor-phase sensors; (2) detection by the human sense of smell; (3) high toxicity; and (4) cost of cleanup. Of these approaches, the detectability of hazardous substances appeared to be the most promising criteria for some hazardous substances. However, only limited analysis could be performed because many of the hazardous substances are solids under standard conditions, but would be dissolved in a vast array of unknown solvents and mixtures when found in underground storage tanks. Many of the release detection methods have not been assessed for the detection of hazardous substances.

Therefore, the Agency concluded that development of class criteria was difficult primarily due to the wide variety of tank siting conditions and tank contents, the lack of some basic data, and the currently weak understanding of some basic transport and fate processes. The development and analysis of these data was judged to be very time consuming. The Agency is continuing to examine this class approach based on the above criteria and today EPA is requesting public comment and information concerning feasible ways of implementing this approach.

(ii) Tank System-Specific Approach. Based on the above discussion, EPA is today proposing that variances from secondary containment requirements be obtained on a tank system-specific basis. This type of variance would be for each tank system taking into account considerations for tank contents and siting. Variances would only be available for new and upgraded existing tank systems, and would be granted by the implementing agency through a review and approval procedure. EPA, however, is still considering the feasibility of granting variances for classes of hazardous substances if the Agency receives evidence that would justify this type of exemption.

Today, EPA has proposed simple procedures in § 280.41(b) for use in applying for individual variances. These procedures are based somewhat on the procedural framework developed for variances that are applied for under the Agency's hazardous waste tank program in 40 CFR 264.193(h). (See 51 FR 25478; July 14, 1986.) If the Agency adopts this approach, guidance for developing and applying for a variance may need to be developed to give a clearer indication of the requirements that a tank owner or operator will need to meet. It is the Agency's intent if such guidance is developed it would be somewhat flexible in approach and some initial concepts which may be included in the guidance are laid out in the subsequent paragraphs.

Today, the Agency proposes that when applying for a tank system-specific variance the owner or operator must demonstrate the reliability of the alternate release detection method(s) to be used taking into account the stored substance, the immediate subsurface tank environment, the characteristics of the tank system, and the performance characteristics of the proposed release detection method and its site-specific design. This will be accomplished in the context of the requirements for at least one of the methods of release detection proposed in 280.41. These demonstrations will be expected to receive careful scrutiny that will determine, with considerable technical certainty, if the proposed use of a particular method will meet all requirements and perform reliably in detecting releases of the hazardous substances in the proposed setting for that particular UST system configuration. This closer type of oversight by the implementing agency is believed necessary to assure that the significant technical uncertainties that now exist concerning the use of several release detection methods—particularly with various hazardous substances—will be carefully reviewed before they are allowed to be used on a long-term basis.

During the early implementation of the variance procedures it may become evident that certain combinations of hazardous substance/release detection systems may be shown to provide reliable detection (for instance, highly volatile chemicals and vapor monitoring). The Agency anticipates that these variance applications will thus be simplified by allowing the tank owners and operators to take advantage of these previously demonstrated combinations and, thus, only be required to show that the site-specific environmental factors are appropriate
for the use of the proposed release detection.

The immediate subsurface tank environment will need to be assessed to determine if the methods of detection will work reliably. This means that the excavation zone and other subsurface areas between the UST and the proposed monitor installation points must be considered in the design of the method for the site. The evaluation of this area would include an assessment of factors such as soil types, site location, historical high water table, localized ground water flow patterns as well as any potential interferences that would affect the accuracy and reliability of the monitoring devices. Interferences are considered to be such things as clay layers, buried electrical lines, or a site located in a flood plain, which could result in periodic flooding of the vadose zone affecting the performance of some release detection systems, such as vapor monitors.

The five general release detection methods proposed for use with new UST systems are available to a tank owner or operator to use as an alternative to secondary containment with interstitial monitoring: frequent tightness testing and product inventory reconciliation; testing and monitoring of vapors in the excavation area; monitoring for liquids on the ground water; monitoring for liquids in the unsaturated zone between the UST and a permeable barrier immediately below it; and automatic liquid monitoring and inventory control inside of the tank. Because all of these methods cannot be used in all situations, certain requirements on the use of each of these methods have been set by the Agency. These requirements are described above in Section VI.D.3. When selecting an alternative release detection method, the owner and operator must demonstrate that site-specific conditions meet these requirements.

Because the current state-of-knowledge of release detection of hazardous substances is relatively weak, the burden of data development and initial analysis of specific release detection methods and their application at a site is placed with the regulated community. This is in keeping with the analysis of the number and placement of monitors, the detection threshold of the monitor, and the sampling frequency to insure reliable release detection. EPA believes that this approach will foster further experimentation and allow for careful selection and application of release detection systems. Because this field is rapidly developing, the Agency believes it is incumbent upon the owners and operators to work with release detection manufacturers in the development of adequate systems. The Agency will remain open to various methods for implementation of this type of variance. For example, the appropriate detectable level could vary from chemical to chemical because the Agency would want to be sure that a release could be detected before an environmental hazard developed.

The Agency, however, has several concerns about the feasibility of this approach. For example, the Agency believes that there are some hazardous substances for which variance should not be granted. These hazardous substances would include those that are acutely hazardous, pyrophoric, or highly water reactive. A specific example of these chemicals are those classified as Poison A in the U.S. Department of Transportation (DOT) Hazardous Materials Table. The Poison A category includes seven poisonous gases and liquids which when mixed with air in very small amounts are dangerous to life. The Agency also believes that the properties of other hazardous substances would either make them not amenable to some of the alternative release detection methods, or result in more careful scrutiny of variance applications. For instance, dense liquids (those with a specific gravity greater than water) cannot use the alternative method for liquids on the ground water. Substances with toxicity greater than benzene (one of the most toxic constituents of gasoline) might suggest more careful scrutiny of proposed alternative release detection methods. These highly toxic substances could be defined as those that are in the "X" category for the toxicity criterion used to establish CERCLA RQs. Approximately 60 of the hazardous substances expected to be found in UST systems have an RQ toxicity value of "X."

EPA today requests comments on the variance procedures discussed above, and is particularly interested in comments on the feasibility of implementing a risk-based variance procedure similar to that in the Hazardous Waste Tanks rules. However, the Agency has not proposed the use of the risk-based variance procedure for tanks storing hazardous substances because of several implementation concerns which include the wide array of hazardous substances and their associated solutions and mixtures, the size of this regulated community, and the potential administrative burdens that might be imposed by such a procedure. The Agency also requests comments and information on how (and by what basis) EPA might identify chemicals that have properties similar to petroleum that could warrant regulation in the manner that is being proposed today for petroleum UST systems.

5. Additional Requirements for Pipings at New UST Systems (Sections 280.42)

a. Additional Requirements for Pressurized Pipings (Section 280.42(a) and (b))

One method of withdrawing substances from an UST is to use a transfer pump which is usually placed in or near the tank. This pump withdraws regulated substances from the tank and forces it under pressure through a pipe to the dispensing meter. Because the substance is under pressure, a structural failure or leak in the transfer pipe will allow it to be released. The proposal contains additional release detection requirements for pressurized piping systems using less than continuous monitoring.

A major concern with the use of pressurized piping systems is the potential for large releases. Data from the Agency's State Release Incidents Survey indicate that releases from piping are somewhat larger than the releases from tanks. This same data also indicates that piping is involved in 20 to 35 percent of all releases reported to the states examined in the study. The Agency suspects that pressurized piping is involved in the larger piping releases because the other approach to product transfer, which uses suction pumps, fails to operate properly when there are leaks in the pipe. Also, it is widely reported that pressurized pipe is the most commonly used petroleum withdrawal system at new installations.

In addition to the general UST system release detection methods that were discussed earlier in this Preamble, pressure-loss sensors are commercially available for use as release detection with pressurized piping systems. These methods sense the pressure in the piping when the transmission pump begins to transfer petroleum from the tank to the product dispenser. A slower than expected drop in pressure could indicate a failure in the pipe and a possible release. This type of system automatically shuts off the product dispensing pipe when the pressure does not reach the expected preset level within a few seconds. Although there is little documented performance data for these piping pressure sensing methods, they are reported to detect at least large rates of release. One currently marketed...
system is claimed to detect and 
shut down in the presence of releases of 
2 gallons per hour. Several more 
sensitive systems are also currently 
available or under development. 

The characteristics of pressurized piping described above have caused the 
Agency to consider not allowing its use 
at new UST installations. However, this 
method of product transfer is reported to 
be widely applied at newer retail 
gasoline outlets, for example, and is an 
important factor in the current design of 
these new stations. EPA has concluded 
that this method of withdrawal can be 
used reliably, in a manner that protects 
human health and the environment, if 
continuous release detection methods 
are employed to ensure potentially large 
"run-away" releases from pressurized piping are detected quickly so they can be 
minimized and contained. As 
described earlier in this Preamble, the 
Agency believes that several release 
detection methods may be reliably 
applied in a manner that will rapidly 
and reliably detect releases, even from the piping. However, EPA is today 
proposing to allow frequent release 
detection that is not continuous. 
Because of the concern that run-away 
releases from pressurized piping can 
create a large release in a relatively 
short period of time, today's 
requirements for release detection at 
new UST systems could allow, under the 
30-day sampling frequency required 
under §280.40(d), a pressurized pipe 
leak to develop into a large release 
before it is detected.

Today EPA is proposing in §280.42(b), 
as an addition to the other release 
detection requirements, that pressurized piping release detection and shutoff 
devices must be used at new UST 
systems with pressurized delivery lines, 
unless the piping system is provided with: 

* A continuous method of release 
detection that complies with 
requirements proposed for new USTs in 
§280.41; or 

* Interstitial monitoring in 
accordance with the UST system release 
detection requirements in §280.41(h).

The Agency has concluded that the 
above two methods of release detection 
adequately address the threat posed by 
underground pressurized run-away 
leaks, provided these methods include 
piping in their coverage. 

Each of the additional requirements 
for pressure piping is discussed in more 
detail below.

(1) Automatic Release Detection and 
Shutoff Equipment (Section 280.42(b)).

Today EPA is proposing that pressurized piping at new USTs without continuous 
release detection or interstitial 
monitoring must also be provided with 
automatic release detection and shutoff 
equipment. Numerous such devices are 
already commercially available and in 
widespread use. One of the 
requirements proposed today 
concerning this equipment is that the 
system be capable of automatically 
detecting a release rate of at least 2 
gallons per hour. It has been reported to 
EPA that there is equipment 
commercially available that can achieve 
this performance and that it is relatively 
 inexpensive to install. EPA believes that 
releases from pressurized piping can 
often rapidly advance to a level that is 
greater than 2 gallons per hour and will, 
therefore, activate these devices. 

Another performance standard proposed 
today for this equipment is that it must 
automatically shut off the transfer pipe 
when a release greater than 2 gallons 
per hour is detected. To minimize 
adverse environmental impacts, these 
releases should be stopped as quickly as 
possible. Again, equipment is reported 
to be widely available and in use that 
will be able to accomplish this 
performance requirement. 

(2) Issues for Public Comment.

Because of the limited experience with 
piping release detection methods, EPA 
has had to develop today's proposal 
based on partial information. Therefore, 
EPA is especially seeking information 
regarding the field performance of 
pressurized piping release detectors. 
EPA is requesting comment on the 
proposed methods and limitations with 
supporting data where available. We are 
also interested in receiving information 
concerning experience with releases 
from pressurized piping and whether 
additional requirements proposed today 
are needed to protect human health and 
environment.

b. Exemption For Suction Piping 
Systems (Section 280.42(b))

Today's proposal provides an 
exemption from the UST system release 
detection requirements of §280.40-41 as 
they pertain to underground piping if a 
suction-type piping system is used that 
meets certain other requirements. This 
method of withdrawing regulated 
substances from an UST uses a suction 
pump which is usually placed away 
from the tank at, or near the dispensing 
meter. This pump draws substances 
from the tank by applying a suction to 
the transfer pipe. Because the substance 
is at least than atmospheric pressure, a 
structural failure or leak in the transfer 
pipe will allow air or ground water to be 
drawn into the pipe instead of allowing 
the regulated substance to be released. 
In addition, if the leak is large enough 
and a significant amount of air enters
leak were to occur at a low point in the piping. If a portion of the piping drains to a low point rather than back to the tank, then some amount of fluid would be trapped there in the event of a loss of suction. A leak at this low point could then allow trapped fluid to be released. This type of release would be small (tens of gallons) in a typical piping layout for retail petroleum product dispensing. However, it can be easily avoided by sloping the pipe back to the tank. If suction is lost in a properly sloped piping system, the contents of the pipe will drain back into the tank. The Petroleum Equipment Institute's RPIOO-sloped piping system, the contents of the tank. 

Dispensing. However, it can be easily avoided by sloping the pipe back to the tank. If suction is lost in a properly sloped piping system, the contents of the pipe will drain back into the tank. The Petroleum Equipment Institute's RPIOO-sloped piping system, the contents of the tank. This type of release would be small (tens of gallons) in a typical piping layout for retail petroleum product dispensing. However, it can be easily avoided by sloping the pipe back to the tank. If suction is lost in a properly sloped piping system, the contents of the pipe will drain back into the tank. The Petroleum Equipment Institute's RPIOO-sloped piping system, the contents of the tank. 

If a portion of the piping drains to a low point rather than back to the tank, then some amount of fluid would be trapped there in the event of a loss of suction. A leak at this low point could then allow trapped fluid to be released. This type of release would be small (tens of gallons) in a typical piping layout for retail petroleum product dispensing. However, it can be easily avoided by sloping the pipe back to the tank. If suction is lost in a properly sloped piping system, the contents of the pipe will drain back into the tank. The Petroleum Equipment Institute's RPIOO-sloped piping system, the contents of the tank. This type of release would be small (tens of gallons) in a typical piping layout for retail petroleum product dispensing. However, it can be easily avoided by sloping the pipe back to the tank. If suction is lost in a properly sloped piping system, the contents of the pipe will drain back into the tank. The Petroleum Equipment Institute's RPIOO-sloped piping system, the contents of the tank. 

This type of release would be small (tens of gallons) in a typical piping layout for retail petroleum product dispensing. However, it can be easily avoided by sloping the pipe back to the tank. If suction is lost in a properly sloped piping system, the contents of the pipe will drain back into the tank. The Petroleum Equipment Institute's RPIOO-sloped piping system, the contents of the tank. This type of release would be small (tens of gallons) in a typical piping layout for retail petroleum product dispensing. However, it can be easily avoided by sloping the pipe back to the tank. If suction is lost in a properly sloped piping system, the contents of the pipe will drain back into the tank. The Petroleum Equipment Institute's RPIOO-sloped piping system, the contents of the tank. This type of release would be small (tens of gallons) in a typical piping layout for retail petroleum product dispensing. However, it can be easily avoided by sloping the pipe back to the tank. If suction is lost in a properly sloped piping system, the contents of the pipe will drain back into the tank. The Petroleum Equipment Institute's RPIOO-sloped piping system, the contents of the tank. This type of release would be small (tens of gallons) in a typical piping layout for retail petroleum product dispensing. However, it can be easily avoided by sloping the pipe back to the tank. If suction is lost in a properly sloped piping system, the contents of the pipe will drain back into the tank. The Petroleum Equipment Institute's RPIOO-sloped piping system, the contents of the tank. This type of release would be small (tens of gallons) in a typical piping layout for retail petroleum product dispensing. However, it can be easily avoided by sloping the pipe back to the tank. If suction is lost in a properly sloped piping system, the contents of the pipe will drain back into the tank. The Petroleum Equipment Institute's RPIOO-sloped piping system, the contents of the tank. This type of release would be small (tens of gallons) in a typical piping layout for retail petroleum product dispensing. However, it can be easily avoided by sloping the pipe back to the tank. If suction is lost in a properly sloped piping system, the contents of the pipe will drain back into the tank. The Petroleum Equipment Institute's RPIOO-sloped piping system, the contents of the tank. This type of release would be small (tens of gallons) in a typical piping layout for retail petroleum product dispensing. However, it can be easily avoided by sloping the pipe back to the tank. If suction is lost in a properly sloped piping system, the contents of the pipe will drain back into the tank. The Petroleum Equipment Institute's RPIOO-sloped piping system, the contents of the tank. This type of release would be small (tens of gallons) in a typical piping layout for retail petroleum product dispensing. However, it can be easily avoided by sloping the pipe back to the tank. If suction is lost in a properly sloped piping system, the contents of the pipe will drain back into the tank. The Petroleum Equipment Institute's RPIOO-sloped piping system, the contents of the tank. 

Check Valves. Today's proposal also requires that only one check valve be included with each suction line to be exempt from the piping release detection requirements. The rationale for this requirement is similar to the argument for the piping slope requirements. Check valves allow the movement of fluid in only one direction and are typically used in suction piping systems to prevent the fluid from returning to the tank. The check valve maintains the prime on the pump and allows dispensing to begin as soon as the pump is turned on. In addition, pump wear would be substantially increased if the line drained back into the tank after each use. When two check valves are used, then the fluid in the line between the check valves can develop a greater than atmospheric pressure. This situation could result from a leak in the upper check valve or a leak in the line between the two check valves. A leak in this pressurized portion of the piping could then cause a small release in a fashion similar to a release in an improperly sloped line. The Agency believes that only one check valve is needed for the proper operation of the suction piping system. However, it has been reported that some existing suction piping systems have more than one check valve due to modification and repair in the piping systems. This practice would not be allowed under today's proposed exemption from release detection for suction piping. 

Check Valve Location. The fourth and final requirement that suction piping must meet to be exempt from the piping leak detection requirements is that the check valve must be located directly below, and as close to as practical to, the suction pump. This requirement ensures that as much as possible of the piping is under suction when the transfer pump shuts off. Historically, check valves have been placed in one of several locations in suction piping systems. One location that is common in older suction piping systems is at the right angled joint directly above the tank. This location allows a large portion of the piping system to pressurize to one to three pounds per square inch when the transfer pump shuts off. While this pressurization is not nearly as great as the typical 40 pounds per square inch pressure in a pressurized piping system, it could cause a release out of a leak in the piping. There are several manufacturers of check valves for use directly below the pump and they are reported to operate satisfactorily in a wide range of conditions. 

Issues for Public Comment. Because of the limited performance data on suction piping system, EPA has had to develop today's proposal based on partial information. Therefore, EPA is seeking information regarding the field performance of suction piping systems. The Agency is particularly interested in receiving information on the potential for releases from suction piping systems. The Agency is also seeking comment on the need for periodic monitoring of the suction piping systems to ensure that the system is operating as intended. It has been reported that the suction piping systems in West Germany are equipped with a bleed valve below the check valve for periodic inspection of the suction line. Every fifth year an inspector opens this valve to check the condition of the suction line. Air entering the line through the open valve indicates that suction is being maintained in the piping. No air entering indicates that suction is not being maintained in the line and the check valve or piping need repair. Fluid coming out of the line through this valve indicates that the line is pressurized and the piping system is in need of modification or repair. EPA is not aware of such a system in use in this country and requests comments on the availability of this type of system and the need for it. 

Requirements for Existing UST Systems. Today EPA is proposing to require that all existing UST systems have release detection. To meet this requirement, UST owners and operators are provided with a wide variety of different monitoring methods to choose from. In proposed 280.40 existing UST systems are allowed to use any of the monitoring methods that can be used by new UST systems: tightness testing and inventory reconciliation, vapor monitoring, liquids on the water table monitoring, automated in-tank monitoring, interception/detection barriers, secondary barriers with intermittent monitoring, or use of other no less stringent detection method, or combination of methods, approved by the implementing agency. Any method used to meet the release detection requirement must meet the performance requirements provided for each method in 280.41 for new UST systems (as previously discussed in this Preamble). It must also meet the general release detection requirements for all UST systems provided in 280.40: a minimum monitoring frequency of no less than every 30 days; use of a method that detects releases from the tank and the piping; the required use of manufacturer instructions for installation, calibration, operation, and maintenance schedules; documentation of vendor performance claims; and a site assessment when external methods are used. 

In accordance with § 280.30(b), for all methods used outside of an existing UST system (for example, vapor and ground-water table monitoring), the owner or operator must also retrofit the use of spill and overflow equipment at the same time as the release detection. As discussed in more detail in Section VI.D.2 of this Preamble, existing and new spills can confound the external sensors and preclude the detection of a leak in the UST system. Thus any existing UST system that utilizes external release detection must also be provided with spill and overflow equipment at the same time. 

Because the above alternative monitoring methods for new UST systems would require retrofitting and use of wells and other equipment at existing UST systems, the Agency evaluated whether any more implementable (and less burdensome) avenues might be open. As described earlier, tank tightness testing and inventory reconciliation are the two most widely used methods of release detection for UST systems. Both of these methods have the advantage of not requiring significant retrofitting (although tightness testing may require some retrofitting) and being more readily available to the regulated community than other methods. Therefore, EPA is proposing to allow the use of the combination of infrequent tank tightness testing and manual (or automatic) inventory reconciliation
controls as another release detection method available for use by owners and operators of existing USTs.

The performance requirements proposed for tightness testing and inventory reconciliation controls were discussed earlier in this Preamble. Therefore, the discussion that follows focuses only on this additional proposed use—on an interim basis only—of infrequent tightness testing combined with inventory reconciliation at existing UST systems. (This interim method differs in frequency from the semiannual tightness testing and inventory reconciliation proposed as an alternative available for new UST systems.)

Under today's proposal in 280.40(c), an owner and operator of an existing petroleum UST system who chooses to use the infrequent tightness testing method to meet release detection requirements must repeat the tank test at least once every 3 years for steel UST systems that are not protected from corrosion; and once every 5 years for all other UST systems. The primary basis for this distinction is the fact that unprotected steel UST systems are more susceptible to corrosion and need to be tested more frequently than the protected steel or fiberglass UST systems.

In developing this proposed frequency for tank tightness testing, EPA reviewed the various schedules for tightness testing currently used in the states. For example, Connecticut specifies a schedule based on the type and age of the UST system with annual tightness testing required for the oldest UST systems. Rhode Island varies between 1 and 5 years depending on the age of the UST system. New York requires testing every 5 years. The states with variable schedules apply more frequent tank testing to the older UST systems. Annual tightness testing is required to prompt the retirement of old UST systems and has been reported to have that effect in the states that require it.

EPA considered establishing a tank tightness testing requirement that, like several state programs, would require all old UST systems to be more frequently tested (thereby prompting their upgrading or replacement) for several reasons. However, a significant amount of data has been collected that reveals that existing tank systems have been found to leak at all ages. Furthermore, on a national basis, many of the existing tanks appear already to be over 10 years old or their age is unknown. In either situation, significant implementation difficulties are posed for a schedule based on age. Thus, as discussed in more detail earlier in this Preamble, EPA has instead decided to propose that all UST systems be upgraded or replaced to the new tank standards within 10 years and to require tank testing on an infrequent schedule during this interim transition period. (See Section VI.D.3 for more details.)

Under the testing frequency proposed today, the vast majority of existing UST systems (the unprotected bare steel variety) will be required to conduct a tightness test once every 5 years if they choose this alternative method of release detection. Judging from experience in California, where several alternative detection methods have been allowed but the choice of tank testing predominates, it appears likely that many owners and operators will select this one alternative method of release detection if allowed for existing UST systems by EPA. This raises a concern about whether this frequency of tank tightness testing can be accomplished for such a large portion of the existing UST systems in this universe. To alleviate this concern somewhat, the Agency decided to propose a longer time period between tests for UST systems that are protected from corrosion (the primary cause of release). Current estimates are that new fiberglass and corrosion-protected steel UST systems may comprise as much as 20 to 25 percent of the existing tank universe by the time the final rule is effective. These safer (corrosion-resistant) existing UST systems would, therefore be required to conduct a tightness test only once every 5 years. This lower demand on tank testing, plus the numerous new replacement tanks that we expect will be installed within the first 5 years of the program using various other methods of detection should enable tank testing to be reliably accomplished at this more infrequent and implementable level nationwide.

EPA solicits comments and information concerning the use of infrequent tank tightness testing combined with inventory controls at existing UST systems during the 10-year period before all UST systems have to be replaced or upgraded to the new tank standards. EPA also solicits comments and information about the appropriateness of the proposed frequency of tank tightness testing combined with inventory reconciliation allowed at existing systems. Another frequency that was considered by the Agency during the development of this proposal was to require existing tank systems to perform annual tightness testing plus inventory controls if they are not provided with frequent to continuous monitoring after the 3- to 5-year phase-in period for release detection that is also being proposed today (see Section VI.B.2 for more details on the phase-in period for release detection). Annual tightness testing plus inventory reconciliation would detect releases sooner than infrequent testing and would place less dependence on manual inventory reconciliation as a release detection method. This would reduce the quantity of a release at any one site prior to detection and thereby enable reductions in the potential environmental impacts and cleanup costs.

After the phase-in period of 3 to 5 years, the vendors of tank tightness testing services, as well as the regulated community, would be in a better position than today in providing annual tightness testing. EPA requests comment on whether annual tank testing is necessary and implementable for existing USTs after this initial phase-in period.

Today's proposal allows existing hazardous substance UST systems to use the same methods of release detection allowed for new UST systems. Similarly, existing hazardous substance UST systems are allowed to use the infrequent tank tightness testing and monthly inventory controls method of detection during the 10-year interim period when all existing UST systems must be upgraded or replaced to the new tank standards (with interstitial monitoring secondary containment for hazardous substances UST's).

In developing today's proposed approach for existing hazardous substance UST systems, the Agency was concerned about the lack of release detection for these UST systems. As discussed earlier, all release detection is being developed and primarily aimed at petroleum UST systems because they represent at least 95 percent of the UST universe. Through today's proposal, the Agency intends to encourage the extension of this developing technology to the many hazardous substance UST systems storing chemicals that are similar in nature and detectability to petroleum. Any hazardous substance UST system that cannot apply accurate and reliable release detection according to the limitations proposed today will be required to upgrade to secondary containment and interstitial monitoring within 3 to 5 years.

As with new hazardous substance UST's, the Agency considered requiring all existing hazardous substance UST systems to receive a variance if they wanted to apply a method of release detection other than secondary containment and interstitial monitoring. However, this was not proposed for
several reasons. First, with over 50,000 existing hazardous substance UST systems, the Agency was concerned that the variance process, as required for new UST systems, could not be accomplished within 3 to 5 years for existing UST systems. The Agency could be overwhelmed by variance requests, because an existing UST system would have to get a variance within 3 to 5 years or retrofit/replace with secondary containment. Second, EPA believes a variance process would unnecessarily slow down the development and application of other methods of release detection to hazardous substances that are very similar in nature (and detectability) to petroleum products. Instead, EPA will provide closer oversight of the review of these applications at new and upgraded UST systems (under the variance process previously described) and this will provide important experience for both EPA and the regulated community to discover what methods of release detection can be used with which types of hazardous substances. In the absence of such experience, a variance for existing UST systems would be difficult to accomplish. Third, the Agency will require submission of an alternative demonstration (and EPA review and oversight) after 10 years. Thus, anyone using any of these methods inappropriately and who has not been discovered through routine on-site inspections) will have to demonstrate the method is reliable when all existing UST systems are to be upgraded to new UST standards.

EPA requests comments and information on the appropriateness of the above approach toward allowing existing hazardous substances UST systems to utilize an alternative method of release detection for up to 10 years without an approved demonstration. Should the Agency set a shorter time frame for upgrading hazardous substance UST systems?

7. Release Detection Recordkeeping (Section 280.43)

EPA is today proposing that all UST owners and operators must maintain release detection records capable of demonstrating compliance with the applicable requirements of release detection in Subpart D. These records must include:

- All written performance claims, and their manner of determination for the method of release detection used, as provided by the equipment, manufacturer or the installer, to be maintained for a period of 5 years; and
- The results of sampling, testing, or monitoring, to be maintained for at least one year, except that the results of tank tightness testing must be retained until records are available for the next test.

A record of all calibration, maintenance and repair of release detection equipment maintained for at least one year from the date the service is performed.

The need to maintain a record of all release detection performance claims and their derivation, is discussed earlier in the Preamble (see Section VI. D. 2). Among other uses, the presence of owners and operators an important basis with which to evaluate the future performance of the equipment at a given site. Although many owners and operators will choose to retain such information for as long as they use the equipment, today’s proposal requires in § 280.43(a) that they be retained for at least 5 years. This is intended to provide the implementing agency with sufficient time to ascertain the release detection method’s compliance with the regulations through routine site inspection. EPA recognizes that these records may vary considerably in detail depending upon the owner and operator’s choice of method and the availability of proof of performance from the vendors of the equipment.

Proposed § 280.43(b) requires all sampling, monitoring or testing results to be maintained for at least one year, except that the more infrequent tank tightness testing results allowed on an interim basis for existing UST systems must be retained until records are available from the next test. These requirements are expected to be sufficient for an inspector to determine that the UST owner and operator is complying with the release detection requirements. For example, the results of the last tightness test (plus a year’s inventory control records), or the recorded results of monthly well samples, must be inspected to determine compliance with the applicable requirements for those methods of detection. Automatic, continuously-alarm monitoring systems need not keep records that must be maintained for one year, because compliance will be determined during a site visit that shows whether the system is operating properly. Section 280.43(c) requires a record of all calibration, maintenance and repair of release detection equipment be kept for at least one year after the service is completed.

After the service is performed for the owner and operator, maintenance of the methods of release detection allowed in today’s proposal are implemented through the use of automated equipment that consists of sensitive electronics and instrumentation. To work properly and within the specifications of the manufacture, such sophisticated methods of detection generally need to be periodically calibrated and maintained to assure measurement performance that will achieve designed detection performance. Repairs of this equipment will be inevitable over the life of its operation. Such periodic maintenance and repairs are necessary for the release detection sensors and data analysis to be able to achieve the performance standards proposed for each method today.

Maintenance calibration and repairs will be generally performed by the equipment installer or manufacturer according to schedules and procedures particular to the type of instrumentation used. Because of the critical nature of this activity, EPA is proposing that a record of such work be maintained for one year. A copy of any invoice receipts or a completed manufactured/installer maintenance checklist signed by a technician servicing the equipment would be sufficient record to enable an inspector to assure that proper steps are being taken towards calibrating and maintaining equipment. This record must be kept for at least one year to enable an inspector to assure during an on-site visit that the instrumentation is being properly maintained by the owner and operator to obtain meaningful and reliable detection results.

E. Reporting of Suspected Releases, Spills, and Release Investigation and Confirmation

a. Overview

All suspected releases must be investigated in order to discover if an UST is leaking. This is a necessary step prior to the abatement and remediation of a possible release. In addition, reporting of suspected and/or confirmed releases to implementing agencies allows the authorities to ensure that appropriate actions are taken to protect human health and the environment.

EPA’s State Release Incidents Study indicates that most releases today are first identified by sensory observation of the stored product in the environment. More than 70 percent of the releases were identified by these observations, which include the sight, taste, or smell of the released product in ground water, surface water, sewer lines, electrical conduit/vaults, excavations, or basements. Consequently, in most cases, it is necessary to conduct an investigation to identify (or confirm) the source of the suspected release.
The release investigation and confirmation process, however, is sometimes complex. For example, the owner of an UST system may typically be reluctant to begin the process of release investigation, due to the significant cost involved. In addition, complications are posed by the development and implementation of criteria and procedures to determine the appropriate circumstances for initiation, conduct, and conclusion of the confirmation process. Also, conclusive proof of the presence or absence of an underground release is not always easily obtained because release detection methods used may yield contradictory or inconclusive results. For instance, regulated substances could be discovered in the soils surrounding the UST, yet a tank tightness test may not indicate the presence of a leak. As discussed previously in this Preamble, tank tightness test results alone cannot absolve the UST owner/operator from consideration as a possible contaminant source because this method of detection cannot detect small releases or spills. Thus, another method of release detection (e.g., test samples taken from within the excavation) must be employed to corroborate or contradict the tightness test results. When previous results contradict each other, another release detection procedure may be warranted to corroborate whether the UST is leaking or not.

The accuracy of a release detection method is often an issue of concern during a suspected release investigation. For example, inventory control is used fairly frequently as a method for confirming releases; however, it possesses a variable accuracy that is influenced by a number of factors including temperature, meter calibration, and theft. Consequently, indications of small releases by inventory control must be carefully evaluated for the influence of such factors. Moreover, confirmation by another more conclusive release detection method may be necessary. Indications of leakage obtained from other monitoring methods may need to be similarly verified. There currently exists several inventory reconciliation analysis service firms that provide such an evaluation for a fee using computerized statistical techniques.

Testing methods must be utilized with great care to provide an effective means of release confirmation. For example, as discussed in Section V.L.D. of this Preamble, the use of tightness testing to confirm releases relies upon the accuracy of the test procedures. Variables such as temperature, tank end deflection, and vapor pocket formation may substantially influence the results of the testing procedures. The use of testing methods for release confirmation is further complicated by the possible incompatibility of some hazardous substances with certain testing procedures. Equipment used in some test procedures may be damaged when exposed to specific hazardous substances that are stored in underground storage tanks. Thus, care must be exercised in choosing the appropriate testing method as well as in interpreting the test results to assure compliance with the performance requirements for tank tightness testing as specified elsewhere in today's rule.

All the above concerns have prompted EPA to propose requirements for the reporting, investigation and confirmation of releases today.

b. Current Practices

A review of state and local procedures specified in regulation for release reporting, investigation, and confirmation showed that nineteen states and one local regulation (out of 23 states and 4 local regulations recently reviewed) address leak investigation and confirmation. Most require the reporting of suspected releases. They also specify the type of evidence that should raise suspicion concerning an UST system's integrity. In most cases, this involves identifying variations in the reconciliation of product inventory in excess of a specified volume, such as 0.5 percent of total weekly throughput. Other indications often specified include: a rapid change in the water level in the bottom of petroleum storage tanks, the observed presence of released material in the environment, or an alarm activated by a leak monitoring system. In any case, most of these regulations require any suspected release to be reported immediately to the implementing agency.

The investigative response for a suspected release is prescribed by all of these UST regulations. Less than half of them require a release investigation that consists exclusively of tightness testing as the specified investigation procedure. Several states give a detailed set of procedures for the identification of leaking systems. In all cases, the procedure begins with a recalculation of inventory records. Further steps may include a physical inspection of readily-accessible system components, the recalibration of system dispenser meters, and the tightness testing of the tank and associated piping.

The National Fire Protection Association (NFPA) 329, "Recommended Practice for Handling Underground Leakage of Flammable and Combustible Liquids," and the American Petroleum Institute (API) publication, "Underground Spill Cleanup Manual," provide methods and procedures currently used in the release confirmation process. This NFPA "Recommended Practice" is the current national standard most often cited by existing UST regulations. It addresses release investigation procedures and tightness testing procedures in great detail. The investigation process calls for checking of various potential sources and emphasizes the possibility of multiple sources. The investigation process includes physical inspection, product inventory verification, and the tightness testing of the tank and piping system. NFPA's recommended approach is to require inspection of the storage facility, verification and reconciliation of inventory records, verification of proper dispenser calibration, pressure testing of the piping system, and tightness testing of the tank system. The American Petroleum Institute (API) 1628 recommended practice addresses release investigation procedures. Multiple methods of leak confirmation are emphasized by API, as opposed to reliance on a single release detection method. The possibility of multiple sources of release at the same facility is also stressed.

c. Regulatory Approaches

(1) Reporting of Suspected Releases (Section 280.50(a)). EPA considered three approaches towards requirements for release reporting that basically directed it as to when the reporting would take place:

- Reporting of any suspected release when it is discovered;
- Reporting only when preliminary investigation has begun to reveal whether a release exists or possible sources of a release; and
- Reporting only when releases are confirmed.

Today's approach is based on the first approach (with the exception of small spill reporting) because it enables the implementing agency to become involved early in the development of procedures to be undertaken for release investigation. This provides the agency with the opportunity to provide guidance to help ensure the use of practices that are appropriate to the situation. The implementing agency also needs to be informed of suspected releases because, until it is confirmed and the source is identified, mapping often there is a general disavowal of responsibility for "suspected releases." The second approach was not chosen
because, while it reduces the reporting to only those situations where a responsible party is actually initiating an investigation into a suspected release, it does not allow the agency as much input into the initial planning and decision of whether to proceed with an investigation. Also, once an investigation has been initiated, its course has largely been decided and this investigation has been initiated, its investigation. Also, once an decision of whether to proceed with an investigation into a suspected responsible party is actually initiating to only those situations where a approach would allow much different investigative methods for similar situations, with a wide variation in the reliability of the results. Similarly, “borderline” incidents might never be investigated or confirmed.

The Agency rejected the last two approaches primarily because significant time periods could pass before investigations were initiated or releases confirmed. During these periods, the public would not be informed as to the possibility of a release and its potential adverse impact to human health and the environment. These approaches could also result in significant increased adverse impacts in the environment prior to the identification of any need for corrective action. Therefore, today’s proposal requires reporting of all suspected releases to the implementing agency within 24 hours.

Several situations have been identified by EPA as warranting such quick reporting by the UST owner and operator. Many of these conditions have already been identified as warranting investigation in the two recommended practices mentioned earlier, as well as in several state UST regulations. EPA is proposing the reporting of all the following conditions within 24 hours because they are believed to represent important indications that a release has occurred. The requirement is satisfied by a telephone call. The situations requiring reporting a “suspected release” are:

- Unexplained presence of water in the tank,
- Physical presence of the regulated substance or an unusual concentration of vapors in the immediate vicinity of the UST that are of unknown origin;
- Detection of regulated substance or any associated vapors in areas outside the immediate vicinity of the UST such as in soils, basements, sewers, utility conduits, or nearby surface water; and
- Any spill or overfill of a regulated substance that has entered the underground environment or surface waters, with the exception of small spills that can be immediately contained and completely removed.

The Agency is seeking public comment on the need to quickly report the above conditions. Of particular interest is the question of whether the unusual facility operating conditions proposed today are of sufficient concern or conclusive enough in nature to warrant immediate reporting. Are there other operating conditions that are indicative of a potential release requiring reporting? The reportable situations proposed today will result in some false reports if the equipment indicates a release although none has taken place. Should the owner and operator have more than 24 hours to determine, perhaps in coordination with the manufacturer, if the equipment is indeed operating correctly before reporting to the implementing agency?

Another important question is the reporting of spills and overfills. The Agency believes that spills are not an uncommon occurrence at many of the facilities in the regulated community. As was described earlier, today we are also proposing to require spill and overfill controls and prompt immediate reporting. Are these other operating conditions that are indicative of a potential release requiring reporting? The reportable situations proposed today will result in some false reports if the equipment indicates a release although none has taken place. Should the owner and operator have more than 24 hours to determine, perhaps in coordination with the manufacturer, if the equipment is indeed operating correctly before reporting to the implementing agency?

Some of the major shortcomings described above with less than immediate reporting by the owner or operator could be alleviated by providing a detailed set of standards and procedures in regulation for owners and operators to follow in the investigation and confirmation of suspected releases. However, EPA has determined that it is not possible to comprehensively cover in regulations the wide variety of possible situations that could occur with the investigation of UST releases. The Agency examined several approaches concerning the investigation and confirmation of releases.

In addition to an exact step-by-step investigation procedure, the Agency also considered an alternative approach that would not identify any procedures but rather would leave it completely to the implementing Agency to develop, on a site-by-site basis, requirements for release investigation and confirmation. Such an approach would provide much flexibility to the implementing agency, but would also provide the added burden of performing site-by-site determinations. EPA is concerned that such an approach could actually impede the timely implementation of suspected
release investigations because it would not allow initiative to be taken by owners and operators until they were certain as to their ultimate responsibilities based on a determination by the implementing agency.

Today EPA is proposing a third approach toward release investigation and confirmation: A basic, but not detailed, set of release investigation and confirmation requirements with notification of the suspected release to the implementing agency, so that the agency can have the opportunity to require specific confirmatory actions. After the immediate reporting of all suspected releases and reportable spills, the owner and operator must take one of possibly several routes to investigate and confirm a suspected release.

It should be emphasized that the confirmation provisions of the proposed regulations require UST owners and operators to initiate investigative actions when a suspected release is discovered. After the implementing agency is notified of a suspected release, it has the option under the proposed regulations to require a specific confirmation test to be performed by the owner and operator. The implementing agency has been provided the ability to select an investigative method that will produce the best results, because sometimes additional site-specific judgments are needed in the determination of the appropriateness of a particular confirmation test at a particular site. If such specific directions are not provided by the implementing agency, the owner and operator must follow the procedures required by the proposed regulation. Of course, the owner and operator may undertake immediate corrective action rather than the release confirmation procedures under these proposed regulations.

Proposed § 280.51 establishes that a suspected release will need to be investigated by one of the following methods:

- A site-specific investigation, as required by the implementing agency, that determines whether a release has occurred impacting ground water or soils surrounding the excavation area.

The purpose of this environmental assessment is to substantiate or disprove a release at that particular location.

- If a suspected release was detected within the interstitial area between the UST and the secondary barrier around it, an investigation must be performed to determine if the interstitial monitoring is working properly. For example, a double-walled tank may be investigated by the use of a second method of interstitial monitoring instead of tightness testing the tank or conducting soil borings and analysis outside the tank to disprove the occurrence of a release;

- When a suspected release is identified by the failure of a tank and/or piping tightness test, an investigation that included all of the following steps would be sufficient to substantiate or disprove the presence of a release. A failure of any of these tests would be sufficient to substantiate a release has occurred for the purposes of initiating corrective action under Subpart F or G.

- Verification and reconciliation of any available inventory records to detect whether a discrepancy exists that exceeds the performance requirements set forth in § 280.41(c)(2) (5 percent of weekly flows through or 0.5 percent of monthly flow through);

- After isolating the piping from the tank, the piping fails or passes a retest that must be conducted within 7 days of the initial reporting of a suspected release to the implementing agency;

- After isolating the tank from the piping, the tank fails or passes a retest conducted within 7 days of the initial reporting despite excavating to the tank top and checking/tightening all loose fittings, vent pipes, or other UST system equipment;

- Analysis of soil core samples indicates a level of hydrocarbon or chemical contamination in the unsaturated zone beneath the UST that would warrant corrective action in accordance with Subpart F or G.

- If a suspected release is identified by an inventory reconciliation discrepancy, or other unusual operating conditions, an investigation that evaluated all the factors would substantiate or disprove the presence of a release. A failure of any of the tests would be sufficient to substantiate that a release has occurred:

- Tanks or piping fail a tightness test (conducted within 7 days of initial reporting) performed in accordance with § 280.41(c)(1); or

- Analysis of soil core samples indicates a level of hydrocarbon or chemical contamination in the unsaturated zone beneath the UST that would warrant corrective action in accordance with Subpart F or G.

- With approval by the implementing agency, the performance of an alternative investigation procedure that is no less determinative than any of the above steps and is considered a more appropriate approach by the implementing agency for the suspected release conditions.

There are several important considerations that influenced the development of the above requirements. The first is an acceptance of tank tightness testing as a valuable tool for quickly evaluating the integrity of the UST. It is a procedure that can be performed rapidly, generally with little or no retrofitting of equipment, and should reliably identify large releases. However, this test is not completely determinative and cannot detect small release rates. Thus, where proposed and used as a method for investigating suspected releases, it must be backed up by the use of soil borings samples taken out of the unsaturated zone under the UST (or some equally determinative technique approved by the implementing agency). If both methods do not reveal a release condition, then the initial cause for concern about a suspected release can be discounted.

This regulatory approach is being proposed by EPA because it requires the owner and operator to rapidly begin and complete an investigation procedure (within 7 days) in the absence of specific direction from the implementing agency. However, EPA anticipates that this important interaction between the owner and operator and the implementing agency will often take place after the initial reporting required in § 280.50(a). In many situations, this interaction is a necessary ingredient to determining appropriate and expeditious measures unique to investigating and confirming that a release has taken place at a particular site. For example, sometimes the implementing agency may decide that a more rigorous examination of the ground water and soils surrounding the UST is needed at certain sites because of its nearness to public or private drinking water wells, or nearby places of human habitation (a public school or private residence, for example). Thus, today's proposal is intended to also allow for the development and use of special procedures or enforcement orders by the implementing agency in lieu of the specific investigation procedures proposed today, should they appear to be warranted by that agency to assure human health and the environment is protected.

The procedures proposed today generally require that two methods of measurement be used to corroborate whether a suspected release is actually a release requiring corrective action. Thus, for example, if a monitoring method has identified a suspected release, this can be verified by tank testing and soil borings, or ground water, sampling and soils analysis, or any
other combination believed equally determinative by the implementing agency at that site. Tank testing and inventory controls, however, may not be sufficiently determinative because they may not be able to detect small releases.

Another important consideration is that particular methods of investigation may be unworkable, or may not be necessary, at certain sites. Therefore, today's proposal allows for the implementing agency to approve any investigative procedure believed to be no less determinative than any of the other methods allowed. For example, tank testing may prove unworkable in high water tables or at tanks with certain configurations and equipment. Therefore, other investigation techniques can be substituted by the implementing agency (for example, chromatographic mapping of the soil gas at the site). Also, there are situations where a full investigation may be unnecessary because, for example, the owner and operator has demonstrated to the satisfaction of the implementing agency that the original cause for suspecting a release was a result of a malfunctioning monitor which has been fixed and put back into operation. Finally, there may be situations where the implementing agency deems that the "suspected release" is in fact a release requiring an immediate site assessment and mitigating actions by the owner or operator as part of a corrective action under proposed Subpart F or G of the regulation. For example, a large discrepancy found through an inventory reconciliation or a large amount of product visible in an observation well may, in the judgment of the implementing agency, be sufficient evidence that a release has occurred and that further investigation would just delay needed corrective action.

(3) Off-Site Impacts and Source Investigation (Section 280.52). There is one other release investigation situation that is now commonly occurring and, therefore, is addressed by today's proposal. As stated earlier, releases are now often occurring (given the absence of release detection practices) without the owner or operator's knowledge. These releases are discovered off-site because of impacts to such things as nearby streams, buildings, utility lines or groundwater wells. However, there can be several possible sources in any one area where an impact has occurred.

Therefore, a release can be verified but the source unknown.

An investigation is needed in these situations to identify possible sources of the release and to confirm and stop the actual source(s) from continuing to release regulated substances. Because each of these investigations are unique to the area of impact and will be directed by the implementing agency, today's proposal does not attempt to establish detailed procedures on how owners and operators must carry out any release investigation and confirmation activities. These are necessarily determined on a site-specific basis. However, today's proposal does obligate owners and operators to conduct investigations to identify the source of a known release. The same methods are expected to be used as those used when investigating a suspected release on-site under § 280.51.

To protect human health and the environment, the implementing agency may require the owner or operator to test the tank or equipment for tightness or structural soundness or to conduct environmental testing to determine the magnitude, extent, and effect of the release.

F Corrective Action Requirements for Petroleum UST Systems

Today's proposal sets forth separate corrective action regulations for UST systems that contain petroleum and those that contain hazardous substances. While the basic philosophy, objectives, and structures of the two sets of requirements are the same, EPA believes two distinct subparts addressing petroleum and hazardous substance UST systems are desirable as a means of avoiding confusion over which procedures are applicable to a particular site. The Agency solicits comments on this approach.

Specifically, the Agency requests comment on whether the requirements should be integrated into one subpart in which only the differences in the two processes would be highlighted.

Corrective action is comprised of those activities required or otherwise necessary to respond adequately to a release from an UST that contains petroleum. These requirements apply to regulated petroleum UST systems containing petroleum and such petroleum UST systems for which tank technical standards are being deferred (i.e., are subject to exclusions) by the Agency. This proposal divides specific regulatory requirements for petroleum UST corrective action into two stages.

Stage I consists of the immediate abatement actions that all owners and operators are required to take in response to a release from an UST containing petroleum. It incorporates relevant experience of state and local UST regulatory programs and some of the main features of these programs.

Stage II addresses requirements that specify longer-term corrective action measures that owners and operators must undertake if the implementing agency determines on the basis of submitted data and a site-specific risk assessment that additional corrective action is required to protect human health and the environment. Although owners operators will undertake the corrective action, the implementing agency will determine the measures necessary to protect human health and the environment.

The following sections discuss the steps owners operators must take to respond to a release and the complementary role of the implementing agency in overseeing the owner/operators' activities.

1. Stage I: Immediate Corrective Action Steps

a. Reporting Requirements

Section 9003(e)(3) mandates that EPA promulgate "requirements for reporting of releases and corrective action taken in response to a release from an underground storage tank." Based on available data, EPA believes that many petroleum UST releases and cleanups are currently not being reported to state and local authorities:

- A survey of UST release files in 50 states identified 12,444 state-reported releases.
- Another statistical study leads EPA to estimate that somewhere between 75,000 and 300,000 (5 to 20 percent of the million petroleum UST systems) may be leaking now or will leak in the near future.
- State and local cleanup officials have reported to EPA that typically over half of their work is triggered by reports of corrective action requirements for UST systems containing both petroleum and a hazardous substance.

The Agency recognizes that several petroleum products (e.g., gasoline) inherently contain certain levels of hazardous substances (e.g., benzene, toluene, xylenes), but regards these to be part of "petroleum" for the purposes of Subtitle I. The Agency requests comments on the frequency of, problems with, and suggested approach to
of "nuisance conditions"—indicators of leaks from unidentified UST sources.

(1) Two Release Categories: To address the type of releases to be reported and the reporting trigger for those releases, the Agency proposes to classify releases into two categories: Releases below ground and releases aboveground. A release includes releases to secondary containment devices because the Agency believes such reporting is necessary for the Agency to ensure that released materials are removed from the secondary containment area in a timely fashion and that it is aware of any tank system repairs that may be necessary to prevent further releases from the primary tank system.

Owners and operators must report any below ground petroleum releases of any amount that have been detected using the leak detection methods required by section 903[c](1) and described in Section VLD of this proposal, or using any other indication of a release, such as visual observation. Although reporting of all below ground releases places a substantial reporting burden on owners and operators, the Agency views this requirement as an essential part of effective implementation and enforcement of the statutory requirements and objectives of Subtitle I because determination of the quantity of a below ground release is generally not possible.

For aboveground releases, however, EPA proposes a "reportable quantity" (RQ) approach. Above-ground releases to land must be reported if they exceed 25 gallons, and aboveground releases to water must be reported if they result in an oil sheen on the water, in accordance with the requirements of 40 CFR Part 110.

This approach recognizes the potentially high frequency of small aboveground spills (and, therefore, the potentially large reporting burden) and their limited environmental impact. Nonetheless, the Agency believes knowledge of frequent, repetitive, small releases of petroleum may indicate possible tank system and product management problems worthy of concern if allowed to accumulate. In addition, the Agency is concerned about the potential for a series of small aboveground releases of petroleum to effectively invalidate the use of some release detection methods.

The choice of the 25-gallon reporting threshold for petroleum is based on two separate rationales. The first is linked to data that show that this amount of petroleum is often left in the delivery lines of tanker trucks after product delivery to an UST. If this residual product cannot be returned to the truck, it has often been drained out around the fill pipe and spilled into the excavation area. The frequency of this kind of "routine" spillage seems to be high and of a sufficient magnitude to warrant a reporting requirement, while avoiding the requirement to report releases for much smaller quantities.

The 25-gallon reporting threshold is also based on analyses done in establishing a CERCLA RQ for used oil when it was proposed for listing as a RCRA hazardous waste. Used oil was examined in this analysis for its aquatic toxicity, mammalian toxicity, ignitability, reactivity, and chronic toxicity. This analysis indicated an RQ of 100 pounds or about 20 gallons. As the only oil product so analyzed to-date, this analysis for used oil represents the best basis for establishment of a reporting threshold for aboveground releases to land associated with petroleum UST systems. Public comment is requested on the use of other reporting thresholds that are less than or greater than the 25 gallon threshold selected.

A reporting threshold does not reflect a determination that a release will necessarily present a hazard in that quantity and not a hazard in any smaller quantity. The Agency has found that the actual hazard will vary with the unique circumstances of the release. Extensive analysis is necessary to determine the hazard presented under a number of possible circumstances. The RQ analyses and resulting values represent a determination only of possible or potential harm.

Although reporting triggers have been established for aboveground releases, this does not eliminate the responsibility of the owners and operators to undertake all other appropriate elements of the UST corrective action process described in the proposed rule for an aboveground release that is less than the reportable quantity.

EPA solicits comments with supporting data on these two release categories, including the appropriate reporting threshold for aboveground releases to land and surface water.

(2) Reporting Within 24-Hours. Suspected releases shall be reported to the implementing Agency within 24 hours. This allows implementing officials to advise the owners and operators of the appropriateness of corrective action steps already taken and to suggest additional measures that could be implemented. This approach also ensures that the implementing agency can move quickly to assist a private party in taking corrective action or, in imminently dangerous situations, to intervene directly itself under the authority provided by Subtitle I or an approved state program. This capability for direct government response has been enhanced by the recent Superfund Amendments and Reauthorization Act of 1986, which established a fund for federal response to releases from petroleum UST systems.

(Implementation of that authority is addressed below in Section VII.C. of this Preamble.)

b. Initial Abatement Requirements

If a release is confirmed in accordance with § 280.51 or 280.52, owners and operators must take all necessary actions to abate acute risks to human health and safety. The proposed requirements reflect the approaches taken in emergency responses under section 311 of the Clean Water Act and Superfund cleanups, responses to releases from hazardous waste tanks (Sections 264.196 and 265.196), as well as the experience and practices of existing state UST programs. At a minimum, these actions include stopping the release and mitigating fire and explosion hazards. Stopping the release means, at a minimum, removing as much petroleum from the tank system as is necessary to prevent further release and to allow inspection and repair of the tank system. Mitigation of fire and safety hazards may include contacting local fire and public safety officials for assistance; evacuating affected persons; installing venting systems; and recovering product leaking into subsurface structures, such as basements and sewers.

Once immediate health and safety concerns have been addressed, owners and operators must take additional steps to remove visibly contaminated soil in the excavation zone and in the immediately surrounding area.

Next, owners and operators must report these initial corrective action measures to the implementing agency. If corrective actions are taken immediately upon suspicion or detection of the release, the release and corrective action reports can be made at the same
time. However, initial corrective action measures must be reported no later than 20 days after a release is confirmed. If appropriate, this report should include verification of tank repair or closure.

Owners and operators are also responsible for conducting an investigation to determine the presence of free floating product on the water table. This investigation may rely on excavations, borings, or monitoring wells to identify the amount of free product, if any, present in the release area. Data generated should be sufficient to determine the need for free product removal activities. Finally, owners and operators are required to assemble from investigations of the release area or other sources, any information that the implementing agency considers necessary for completing the initial abatement actions described in these paragraphs. Possible data requirements are specified in the rule.

c. Free Product Removal

If free product is detected floating on ground water, the owner or operator must remove free product to the maximum extent possible. Unless alternative instructions are provided by the implementing agency, the owner or operator must submit a report for free product removal to the implementing agency within 30 days of confirming the release.

Removal of free product is proposed for inclusion as a Stage I activity (which will be performed at all sites where free product is discovered). The Agency believes, based primarily on state UST program experience, that mitigation of present and potential fire and safety hazards due to free product will require removal of the free product in virtually every instance. The requirement to remove floating free product to the maximum extent practicable in all cases reflects EPA's beliefs that: (a) Free product is a safety hazard if left uncontrolled, (b) free product is a continuing source of dissolved groundwater contamination, (c) free product removal is a relatively inexpensive corrective action measure, and (d) free product removal is a common practice today in nearly all UST release cases studied by the Agency.

d. Additional Site Investigation

Owners and operators are also responsible for investigating the nature and size of the release to determine the extent of additional soil and groundwater contamination. This investigation may include collecting and analyzing soil samples, testing the ground water to define the nature and extent of any dissolved contamination plume, and testing adjacent drinking water supplies. While the Agency expects that collection and analysis of soil samples will be a part of virtually all such investigations, the Agency believes that ground water sampling and analysis may not be required at some sites (e.g., sites without fractures, faults or similar heterogeneous geological features) if the owners' and operators' investigation of the extent of soil contamination demonstrates that such contamination does not extend to or come in contact with the water table.

When conducting additional site investigations, owners and operators should make use of data collected during investigations conducted previously or concurrently for purposes other than corrective action. For instance, as discussed previously, § 280.40(b) of the rule requires that a site assessment be conducted to ensure that the method of external release detection selected is appropriate for the site and is designed and installed properly. Since studies of the magnitude and extent of contamination as well as the presence of free product are necessary for determining how well external release detection monitoring will work at a particular site, it is likely that data generated during a release detection site assessment will be applicable to additional site investigations conducted during corrective action. Besides, site investigation activities conducted during release detection and corrective action phases should be coordinated with efforts to assess the excavation area around the UST system prior to permanent tank closure. The activities required for this site assessment are specified at § 280.70(d) of the rule and resemble the requirements for release detection and corrective action investigations.

Information collected by owners and operators during free product removal and site investigations may be used by the implementing agency to determine whether additional information and/or a Corrective Action Plan for additional soil and/or ground water cleanup is necessary.

The above requirements comprise Stage I of the UST corrective action for petroleum tanks required by this proposal. These minimum requirements are applicable to all releases. These regulatory steps are further illustrated below in Table 3. Stage II of these proposed corrective action requirements are dependent on the risk presented by the release and are described below.
Table 3
Corrective Action Process for Petroleum Underground Storage Tanks

<table>
<thead>
<tr>
<th>Step</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Leak Indicated/Suspected</td>
</tr>
<tr>
<td>2</td>
<td>Notify Agency</td>
</tr>
<tr>
<td>3</td>
<td>Confirm Leak or Assume Tank Leaking</td>
</tr>
<tr>
<td>4</td>
<td>Stop Leak Mitigate Fire and Safety Hazard</td>
</tr>
<tr>
<td>5</td>
<td>Notify Agency</td>
</tr>
<tr>
<td>6</td>
<td>Remove Petroleum in Excavation Zone and Immediately Surrounding Area</td>
</tr>
<tr>
<td>7</td>
<td>Investigate Leaks to Determine If They Have Reached Soil and Ground Water</td>
</tr>
<tr>
<td>8</td>
<td>Free Product Mounded on Ground Water Surface (Area and Depth)</td>
</tr>
<tr>
<td>8a</td>
<td>Prepare and Submit Plan for Free Product Removal</td>
</tr>
<tr>
<td>8b</td>
<td>Approval by Agency</td>
</tr>
<tr>
<td>9</td>
<td>Remove Free Product</td>
</tr>
<tr>
<td>10</td>
<td>Submit Investigation Results to Agency</td>
</tr>
<tr>
<td>11</td>
<td>Cleanup Requirements Communicated by Agency</td>
</tr>
<tr>
<td>12</td>
<td>Prepare Corrective Action Plan</td>
</tr>
<tr>
<td>13</td>
<td>Submit Plan to Agency</td>
</tr>
<tr>
<td>13a</td>
<td>Agency Agrees with Plan</td>
</tr>
<tr>
<td>13b</td>
<td>Negotiate Long-Term Corrective Action Program with Agency</td>
</tr>
<tr>
<td>14</td>
<td>Conduct Corrective Action</td>
</tr>
<tr>
<td>15</td>
<td>Periodically Evaluate Results/Report to Agency Renegotiate if Necessary</td>
</tr>
<tr>
<td>16</td>
<td>Terminate Corrective Action</td>
</tr>
</tbody>
</table>

13a: No Remediation Required
2. Stage II: Longer-Term Corrective Action

Generally, reporting releases, abating acute risks, and free product removal are steps that must be taken in all cases of petroleum UST releases. After these steps, variations in the response to a release are likely to occur. Variations in the determination and implementation of appropriate longer-term remedial corrective action plans are discussed below.

To establish appropriate cleanup levels, EPA has studied various options and has evaluated state UST program experience. As a result, EPA proposes a site-specific approach for petroleum UST corrective action regulations. (For a full discussion of the options, see Section V of this Preamble.) This site-specific approach will require a risk assessment for each site to determine if and to what extent soil or ground-water contamination threatens human health or the environment.

a. Establishing a Corrective Action Plan

After the owner or operator has submitted the results of the previously required site investigations of possible soil and ground-water contamination (as described above), the appropriate implementing agency will conduct its analysis—a risk assessment—of the submitted site investigation data. Based on its risk assessment, the implementing agency will establish the requirements for additional cleanup as part of a cleanup plan that must be implemented by the owner or operator. EPA believes that some variability in how the results of the risk assessment process are used to establish cleanup requirements is required to reflect the variability in UST release sites. The Agency, however, intends to develop several tools designed to assist the implementing agency in conducting the risk assessment.

This required risk assessment must be an evaluation of the site-specific risk to human health and the environment based on data drawn from the particular site. At a minimum, the risk assessment should:

- Consider the quantity, toxicity, persistence, and mobility of the material released and include selection of indicator chemicals for use in the analysis;
- Determine the potential pathways of exposure and the number of persons who would be exposed to contamination at various intensities and durations;
- Estimate the concentrations of indicator chemicals at the exposure points identified;
- Estimate human intakes and exposures due to background sources and the release;
- Characterize the resulting risk, including the uncertainties in the risk assessment; and
- Consider the technological feasibility of corrective action measures.

On the basis of the risk assessment, the implementing agency will set the site-specific level that the owners or operators must achieve to clean up contaminated soil and ground water. Cleanup levels based on site characteristics must be identified for all affected media, including subsurface soils, ground water, and surface water. In selecting appropriate clean up levels through the risk assessment process the implementing agency may incorporate consideration of available health-based standards or a state's ground-water classification system (or the EPA's Ground-Water Protection Strategy).

The owner or operator must then submit to the implementing agency for review, in accordance with procedures established during approval of the implementing agency's program, a Corrective Action Plan for achieving the cleanup levels established through the risk assessment. An implementing agency may require owner or operator to commence cleanup before a Corrective Action Plan is approved if such action is necessary to protect human health and the environment. After the implementing agency has approved the Plan, the owner or operator must carry out the Plan. Cleanup could include excavating and repairing the tank (if this was not done as part of initial corrective action); containing the dissolved contamination plume with trenches and barriers; excavating additional contaminated soil; providing alternative drinking water supplies to area residents or applying point-of-use controls; restoring the ground-water source; restricting the use of the contaminated ground water; or allowing natural cleansing of an aquifer. Selection of a proposed remedy is the responsibility of the owners and operators, but the implementing agency must approve the proposed remedy.

During the cleanup, the owner/operators must periodically evaluate the effectiveness of the remediation process. In some cases, the cleanup plan may be modified after these periodic evaluations. For example, existing state UST program experience indicates that the UST corrective action measures initiated with cleanup targets, which were based on the results of the risk assessment process, may sometimes reach a level at which progress toward the cleanup targets is no longer being made. In these situations, modification of the Corrective Action Plan may be appropriate to reassess the choice of a remedial measure or to allow monitoring procedures to be substituted for additional remedial measures, as long as conditions remain stable or improve.

3. Reporting Requirements

The Agency proposes that the owner or operator report all corrective actions, including all immediate response actions taken after a release is suspected or detected and all steps in longer-term corrective action. However, this proposed regulation does not specify the number of corrective action reports to be submitted or the method of reporting. EPA believes these requirements are best left to the discretion of the implementing agency, but is interested in receiving comments suggesting other approaches.

4. Responsibilities of Implementing Agencies

Implementing agencies must monitor the actions required of petroleum UST owners and operators. For example, implementing agencies are responsible for the review of all reports and summaries submitted by owners and operators. These reports include release reports, immediate abatement action reports, site investigation summaries, free product removal plans, Corrective Action Plans, and periodic progress reports on implementation of the Corrective Action Plan. The implementing agency may also assist in or undertake immediate abatement actions in response to a release.

After the owner or operator submits results of the site investigation, the implementing agency is responsible for performing and evaluating the site-specific risk and exposure assessment. On the basis of this assessment, the implementing agency determines the cleanup levels that the owner/operators must attain through response actions described in the Corrective Action Plan. Cleanup levels will be identified for all media affected by the release, including subsurface soil, ground water, and surface water. The implementing agency is also responsible for all oversight of the development and implementation of the Corrective Action Plan by owner and operators, and for the conduct of any public notice and/or public meetings on Corrective Action Plans as established in the public participation requirements of this rule (or under an approved state program).
G. Corrective Action Requirements for Hazardous Substance UST Systems

Corrective action is comprised of those activities required or otherwise necessary to respond adequately to a release from an UST system containing hazardous substances. UST systems subject to these requirements include regulated UST systems containing hazardous substances and UST systems containing hazardous substances for which tank technical standards are being deferred by the Agency.

This proposal divides specific regulatory requirements for USTs containing hazardous substances into corrective action into two stages. The first stage consists of the abatement actions that all owners and operators are required to take in response to a release from USTs containing hazardous substances. It follows requirements established for a response to a release from a hazardous waste tank regulated under Subtitle C of RCRA (40 CFR 264.196). Stage two addresses requirements that specify longer-term corrective action measures that owners and operators must undertake if the implementing agency determines on the basis of submitted data that additional corrective action is required to protect human health and the environment. Although owners and operators will undertake the corrective action, the implementing agency may intervene under the authority provided in RCRA or CERCLA, or as provided in an approved state program, if necessary to ensure that adequate measures are taken to protect human health and the environment.

The following sections discuss the steps owners and operators must take to respond to a release and the complementary role of the implementing agency in overseeing the owners' and operators' activities.

1. Stage I: Immediate Corrective Action Steps

a. Reporting Requirements

As with releases from USTs containing petroleum, to address the type of releases to be reported and the reporting trigger for those releases, the Agency proposes to classify releases into two categories: releases below ground and releases aboveground. A release includes releases to secondary containment devices because the Agency believes such reporting is necessary for the Agency to ensure that released materials are removed from the secondary containment area in a timely fashion and that it can be made aware of any tank system repairs that may be necessary to prevent further releases from the primary tank system.

Owners and operators must report all below ground hazardous substance releases of any amount that have been detected using the leak detection methods described in Section VI.D of this proposed rule, or using any other indicator of a release such as visual observation: Although reporting of all below ground releases places a substantial reporting burden on owners and operators, the Agency views this requirement as an essential part of effective implementation and enforcement of the statutory requirements and objectives of Subtitle I because determination of the quantity of a below ground release is generally not possible.

For aboveground releases, however, EPA proposes to base UST reporting on the reportable quantities developed under CERCLA (40 CFR Parts 117 and 302). The CERCLA RQs (i.e., reporting thresholds that warn of possible or potential hazard that should be investigated) already apply to UST releases of hazardous substances since such releases must also be reported to the National Response Center under CERCLA section 103. Although reporting triggers are proposed for notification of an aboveground release, this does not eliminate the responsibility of the owners and operator to undertake UST corrective action as required in today's proposed rule for all aboveground releases, including those that are less than the reportable quantity.

EPA solicits comments with supporting data on these two release categories, including using the reportable quantity thresholds of CERCLA to require reporting to the UST implementing agency as well as the National Response Center.

b. Initial Abatement Requirements

When a release is reported in accordance with Section 280.50, owners and operators must take all necessary actions to abate acute risks to human health and safety. The proposed requirements reflect the approach adopted for response to releases from hazardous waste tank systems regulated under RCRA. At a minimum, these actions include stopping the release and removal of any remaining hazardous substances as is necessary to prevent further release and to allow inspection and repair of the tank system to be performed. Owners/operators must take appropriate steps to prevent further migration of an aboveground release to soils or surface water, and remove visibly contaminated soil from an aboveground release.

Next, owners and operators must report these initial corrective action measures to the implementing agency. If corrective actions are taken immediately upon suspicion or detection of the release, the release and corrective action reports can be made at the same time. However, initial corrective action measures must be reported no later than 20 days after a release is confirmed. If appropriate, this report should include verification of tank repair or closure.

Owners and operators are also responsible for investigating the nature and size of the release to determine the extent of additional soil and groundwater contamination. This investigation may include collection and analysis of soil samples, installing of monitoring wells to identify the presence of free product, testing the ground water to define the nature and extent of any dissolved contamination plumes, and testing adjacent drinking water supplies. This information, or other data that may be required, must be sufficient for the implementing agency to make a decision with respect to type and degree of additional corrective action, if any, may be appropriate.

The above requirements comprise Stage I of the UST corrective action for hazardous substance tanks required by this proposed rule. These minimum requirements are applicable to all releases. Stage II actions of these proposed corrective action requirements are dependent on the risk presented by the release and are described below.

2. Stage II: Longer-Term Corrective Action

Generally, stopping the releases, release reporting, and containment of visible contamination are steps that must be taken in all cases of releases of hazardous substances from an UST. After these steps, variations in the response to a release are likely to occur. Variations in the determination and implementation of appropriate longer-term remedial corrective action plans are discussed below.

EPA proposes a site-specific approach for hazardous substance UST corrective action regulation. (For a full discussion of the options, see Section V of this Preamble.) This site-specific approach will require an assessment for each site to determine if soil or ground-water contamination threatens human health or the environment. As discussed in the section on additional site investigations for purposes of petroleum UST corrective action, owners and operators conducting additional site investigations for purposes of hazardous substance UST corrective action should utilize
relevant data generated during site investigations conducted for external leak detection and tank closure purposes.

a. Establishing a Corrective Action Plan

After an owner and operator has submitted the results of the previously required site investigations of possible soil and ground-water contamination (as described above), the appropriate implementing agency will conduct its analysis of the submitted site investigation data. The implementing agency may require additional assessments of the release to be performed. Based on its assessment, the implementing agency will establish the requirements for additional cleanup as part of a corrective action plan.

On the basis of the assessment, the implementing agency will set the site-specific requirements for free product removal and/or cleanup of contaminated soil and ground water that the owner and operator must attain as part of the corrective action plan. Cleanup levels based on site characteristics must be identified for all affected media, including subsurface soils, ground water, and surface water. In selection of appropriate clean-up levels through the risk assessment process, the implementing agency may incorporate consideration of available health-based standards or a state's ground-water classification system.

The owner and operator must then submit to the implementing agency for its review a plan for free product removal and for achieving the clean-up levels established through the risk assessment. After the implementing agency has approved the plan, the owner and operator must carry out the plan. Cleanup could include excavating and repairing the tank (if this was not done as part of initial corrective action); removing free product; containing the dissolved contamination plume with trenches and bermers; excavating additional contaminated soil; providing alternative drinking water supplies to area residents or applying point-of-use controls; restoring the ground-water source; restricting the use of the contaminated ground water; or allowing natural cleansing of an aquifer.

Selection of a proposed remedy is the responsibility of the owner and operator, while the implementing agency must approve the proposed remedy.

During the clean-up, the owner and operator must periodically evaluate the effectiveness of the remediation process. In some cases, the clean-up plan may be modified after these periodic evaluations. For example, in some instances the UST corrective action measures initiated with cleanup targets based on the results of the assessment process may reach a level at which progress toward the cleanup targets is no longer being made. In these situations, modification of the plan may be appropriate to reassess the choice of a remedial measure or to allow monitoring procedures to be substituted for additional remedial measures as long as conditions remain stable or improve.

3. Reporting Requirements

The Agency proposes that owners and operators report all corrective action, including all immediate response actions taken after a release is suspected or detected and all steps in longer-term corrective action. However, the proposed regulation does not specify the number of corrective action reports to be submitted or the method of reporting. EPA believes these requirements are best left to the discretion of the implementing agency, but is interested in receiving comments suggesting other approaches.

4. Responsibilities of Implementing Agencies

The responsibilities of the implementing agency for tanks storing hazardous substances are similar to those for tanks storing petroleum.

H. Removal From Use, Temporary Closure, and Permanent Closure (Section 280.80)

a. Overview

When a UST reaches the end of its useful life, it must be permanently closed. Improper closure or abandonment of a UST may contaminate the environment and endanger the public health.

EPA’s State Release Incident Study identified approximately 300 incidents implicating abandoned UST systems as the source. In addition, discussions with state officials suggest that many more improperly abandoned UST systems throughout the nation are leaking or may leak in the future. EPA believes that requirements for the proper closure of UST systems is necessary to prevent future releases from abandoned tanks.

There are two methods to permanently close a UST: Removal from the ground or closure in place. The choice of method depends on the particular site, the applicable state and local regulations, and financial considerations.

Both of these methods for permanent closure have advantages and disadvantages. Closure in place typically costs less than removal from the ground, but it is difficult to remove all product and residues from the buried tank and to completely fill the tank with an inert material. Future construction at the site may be hampered by the presence of a UST filled with concrete or sand. Tank removal avoids these problems, but it costs somewhat more and creates a potentially dangerous situation when the tank’s vapors are purged into the air. Disposal of removed tanks also presents a problem in many areas of the country.

b. Current Practices

Of the eighteen states with existing regulations for permanent closure, nearly all require the reporting of closure to the regulating authority and the removal of all product from the UST. Tanks closed in place must be filled with an inert material. Tanks closed by removal must be purged of vapors on site and either rendered useless before disposal or cleaned and prepared for reuse. Beyond this consensus, however, state regulations vary greatly. Some states allow closure in place only when tank removal is impossible or impractical. Some mandate precision testing of tanks prior to closure in place to ensure that the tank is not leaking.

Most states that address permanent closure also regulate temporary closure. These regulations allow a UST a limited time to remain out of service before it must be returned to service or permanently closed. The time limit and accepted procedures for temporary closure vary. Some states allow product to remain in the tank; others require the tank to be empty during temporary closure. Still others require that product be removed from the tank and replaced with water and a corrosion inhibitor.

There are also existing industry consensus codes, such as NFPA 30 and API 1604, which recommend procedures for permanent closure. Although these codes should ensure containment of product, they could allow a tank owner to literally cover up prior releases and leave a site that could cause future environmental contamination.

c. Today’s Proposal

Today, EPA proposes a regulatory approach that builds on these existing consensus codes and state regulatory approaches. This approach will also require owners and operators to conduct a limited site assessment at the time of permanent closure. The advantage of this approach is that it will prevent contamination problems from being covered up at closure. With numerous closings of UST systems expected over the next five to ten years, EPA believes that it is important that owners and
operators of UST systems determine if there is a contamination problem before they walk away from these sites. The proposed approach in 280.80 covers tanks temporarily out of service, and the temporary and permanent closure of tank systems. These are the topics covered by state regulations. In summary, any tank that contains product is subject to release detection requirements regardless of whether the tank is in service. Tanks out of service for a period of time may become a receptacle for illegal dumping of hazardous materials unless the fill and delivery lines are capped. The Agency is proposing that after three months tanks must be temporarily closed, leaving only the vent line open. EPA solicits comments on the appropriateness of this time frame, and especially hopes to elicit data showing the environmental risks associated with different schedules.

At some later point, if the UST is not going to be put back in service, the system should be permanently closed. EPA believes that two years is a reasonable amount of time for a tank owner or operator to decide whether to permanently close or to re-use the tank. During this time, the environment will remain protected by being capped and continued release detection. The Agency, however, needs to put a limit on how long "temporary" should be, and solicits comment on the 24 month limit proposed today.

(1) Temporary Closure (Sections 280.80 (a) and (b)). If a tank system is taken out of service for any period, the owner and operator must continue to maintain the corrosion protection system as well as monitor or test for leaks as required by the leak detection regulations. If a leak is detected, release investigation and corrective action regulations will apply. A tank system out of service for 3 to 24 months must be temporarily closed. The owner or operator must:
   • Continue monitoring for leaks;
   • Leave the vent line open and functioning;
   • Cap and secure all other lines, pumps, manways, and ancillary equipment;
   • Notify the implementing agency of a return to service or permanent closure.

(2) Permanent Closure (Sections 280.80(c)-(f)). If a tank system is taken out of service for over 24 months, it must be permanently closed. Today’s proposal requires that any tank system that is taken out of service permanently must be removed from the ground or be closed in place. If the tank is removed, the owner and operator must:

   • Remove all flammable liquids from the tank system;
   • Remove all pipes from the UST, and purge the UST of all hazardous vapors before removal and disposal.
   • If the tank is closed in place, the owner and operator must:
     • Remove all flammable liquids from the tank system;
     • Disconnect or cap all pipes; and
     • Fill the tank system completely with an inert solid material.

The above steps are widely-accepted industry closure practices and are reflected in national consensus codes such as NFPA 30.

For permanent closure, EPA is proposing an additional step beyond the current industry recommended practices. The owner or operator must assess the site for contamination from the tank. The use of release monitoring methods that utilize sensors external to the tank will meet this requirement. The owner or operator may also use such techniques as gas chromatograph mapping or the analysis of ground water or soil core samples for evidence of contamination by released product. The purpose of this site assessment is to ensure that there is a clean site at closure. If this site assessment indicates that a release has occurred, the owner must perform corrective action in accordance with applicable regulations in Subparts F and G.

In an effort to keep owners and operators from improperly closing UST systems before these proposed regulations become effective and to combat contamination from UST systems improperly abandoned in the past, the Agency proposes that the closure provisions be applicable to UST systems taken out of operation prior to the effective date of these regulations. Thus, the proposal requires that UST systems that are improperly closed prior to the effective date of these regulations be revisited and properly closed. All UST systems improperly closed before the effective date of the final regulation must therefore be either removed or filled with an inert substance. There are no proposed requirements for UST systems properly closed in the past.

All owners and operators who improperly closed UST systems before the effective date of the regulation must, in addition to properly closing their systems, perform a site assessment and notify the implementing agency. Congress expressed its concern for abandoned tanks by including tanks closed in place within Subtitle I’s jurisdiction. The Agency believes that such tanks must be closed properly but believes that owners and operators who followed the NFPA code and the recommended practices described in API 1604 when they closed their tank systems, representing the state-of-the-art at the time, need not be required to revisit their tanks and conduct the site assessment required for improperly closed systems. EPA specifically solicits comments on the proposal to exempt tanks that were closed in accordance with API 1604 and NFPA 30 from the site assessment requirements.

d. Closure Records (Section 280.80(g))

EPA is proposing some basic requirements concerning recordkeeping that will ensure the closure requirements in 280.80 are being complied with. Section 280.80(g) requires that the sampling, testing, or monitoring results required during temporary closure (under § 280.80 (a) and (b)) be maintained for at least one year. Section 280.80(g) also requires that a record of the results of the assessment performed for closure under § 280.80(d) be maintained for at least 3 years after permanent closure is completed. This closure record consists of the results of all tests, soils samples analysis, site inspections, or other site assessment methods required by the implementing agency. This record is instrumental in demonstrating that closure was performed properly. The proposed regulation also addresses the question of where records can be kept after UST system closure. In many instances, this will be conveniently accomplished at the closed site by either the owner and operator who caused the UST system to be permanently closed, or the new site owner and operator. In some instances, for example with the cessation of all operations on the site, the record may have to be kept off-site. However, this record must be made immediately available at the request of the implementing agency. The proposal also allows owners and operators the alternative of mailing a copy of these assessment results to the implementing agency, particularly if the records cannot be maintained at the closed facility.

VII. RELATIONSHIP TO OTHER ASPECTS OF THE UST PROGRAM

A. Interim Prohibition

Section 9003(g) of RCRA Subtitle I sets forth requirements for tank systems installed between May 7, 1985 and the effective date of the final rules resulting from today’s proposal. During this period, UST installations used to store regulated substances must be corrosion protected, made of noncorrodible materials, or otherwise designed and
constructed to prevent releases during the operating life of the facility due to corrosion or structural failure. The tank material(s) of construction must also be compatible with the substance(s) to be stored.

The standards for new tank systems in today's proposed rules (as discussed in Section VI of this preamble) are designed to modify and expand upon the Interim Prohibition requirements. The proposed rules include design, construction, installation, release detection, and compatibility standards for new tank installations. The Interim Prohibition requirements will continue in place until the effective date of the final rules when the standards for new tanks will replace the Interim Prohibition standards for most new UST systems. The Interim Prohibition will, however, remain in effect for those tanks which were deferred from coverage under the technical standards in Subpart A (i.e., sumps, hydraulic lifts, bulk tanks, radioactive waste tanks, tanks containing electrical equipment, used oil tanks, and wastewater treatment tanks).

B. Notification

On November 8, 1985, EPA published the Final Rule on Notification Requirements for Owners of Underground Storage Tanks (50 FR 46602). A form to be used for the required notification was included as part of the rule.

The UST rules and standards for new tanks proposed today are not intended to affect these established notification requirements but to add to the information required to be submitted with the notification (see Section VI.B.). Owners of existing UST systems were required to notify their designated state agencies by May 8, 1986. Owners of new or replacement UST systems must notify their designated state agencies within 30 days of bringing the tank into use by submission of the November 8, 1985 federal form, or an approved alternate state notification form.

Section 9002(a)(6) of RCRA requires that, beginning thirty days after the issuance of the final new tank performance standards, and for 18 months thereafter, any person who sells a tank intended to be used in an UST system must advise the tank purchaser of the owner's notification requirements. This requirement would begin after the finalization of the new tank performance standards that are being proposed today.

C. Leaking Underground Storage Tank Trust Fund

Amendments to Subtitle I of RCRA recently enacted as part of the Superfund Amendments and Reauthorization Act of 1986 (SARA) provide for a Leaking Underground Storage Tank Trust Fund. The amendments provide funds for cleanup of petroleum spills from UST systems and give EPA, and states that enter into a cooperative agreement with EPA, the authority to respond to releases of petroleum from UST systems. These amendments to RCRA were necessary because no other federal environmental program includes specific authority for response to petroleum UST releases, although releases of petroleum affecting navigable waters can be responded to under section 311 of the Clean Water Act.

The amendments provide that the Administrator may issue an order requiring corrective action prior to the promulgation of final corrective action regulations under Subtitle I. After the promulgation of the corrective action regulations being proposed today, the Administrator may use this same order authority, under section 9003, as well as the enforcement authority of section 9006, to require owners or operators to undertake corrective action.

The Leaking Underground Storage Tank Trust Fund will be financed by taxes on motor fuels to pay for response costs in a limited set of circumstances. Before the effective date of the final corrective action rules, the Administrator, or states under cooperative agreements, may use the Fund to pay for a particular corrective action whenever that action is necessary to protect human health and the environment.

After the effective date of the corrective action regulations, the amendments provide for the use of the Fund primarily where the financial resources of the owner or operator are not available. In some cases, an identifiable and solvent owner or operator may be in compliance with all UST financial responsibility requirements (discussed elsewhere in today's Federal Register) but lack financial resources to pay the entire cost of a response. In those cases, the Administrator or a state with a cooperative agreement is authorized to use the Fund to pay the costs that exceed the level of financial responsibility required of the owner and operator by the final financial responsibility regulations. If the owner and operator has failed to maintain the required level of financial responsibility, the Trust Fund may not be used, unless: (1) The owner or operator is insolvent; (2) there is an imminent and substantial threat to human health or the environment; or (3) there is a need to provide alternative water supplies or relocation of residents.

In all other instances the Administrator, or state (under a cooperative agreement), can use the order authority provided by the Trust Fund and section 9006, to require corrective action by the responsible party prior to the use of the Trust Fund.

Before the effective date of the final corrective action regulations, cleanups carried out using the Trust Fund will be based on guidance issued by EPA. After the effective date of the final regulations, cleanups under the Trust Fund must be conducted in accordance with the corrective action regulations.

D. Exempted Tank Studies

The regulations proposed today do not apply to certain tank systems that were exempted under section 9001 of Subtitle I. Section 9009 of Subtitle I requires that EPA conduct a study of several of these systems and report to Congress by November 8, 1987. The report to Congress will include recommendations as to whether these tanks should be regulated in the future.

The Report to Congress will cover the following exempted tanks whose volume, including piping, is at least ten percent below ground:

- Farm or residential tanks of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes, and
- Tanks used for storing heating oil for consumptive use on the premises where stored.

VIII. RELATIONSHIP TO OTHER AGENCY PROGRAMS

This section discusses the relationship of today's proposed rules to other EPA regulatory programs. This discussion is for informational purposes only; no new requirements are being proposed.

A. CERCLA

Section 105 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA or Superfund) requires development of a list of national priorities among known sites with releases and threatened releases of hazardous substances, pollutants, and contaminants. The National Contingency Plan (40 CFR Part 300) regulates development of the National Priorities List (of sites with releases) as well as appropriate
responses to the most serious releases. These regulations pursuant to CERCLA currently apply to releases of CERCLA-designated hazardous substances from underground storage tanks. CERCLA, however, does not apply to releases of petroleum from USTs or other sources.

Releases of hazardous substances from UST systems may require removal or remedial action responses by federal or state agencies, in accordance with 40 CFR Part 300. Some UST releases of hazardous substances are already included in the National Priorities List. When the final rules resulting from today's proposal become effective, owners of sites with releases from USTs containing nonpetroleum regulated substances are expected to be subject to the corrective action provisions of these rules and, in selected cases, the removal or remedial action measures of 40 CFR Part 300.

Under section 102(a) of CERCLA, EPA has promulgated regulations (40 CFR Part 302) that identify hazardous substances and quantities of releases of these hazardous substances that must be reported to the National Response Center. Those regulations contain reporting requirements for releases equal to or in excess of the established reportable quantities (RQs). Thus, UST releases of hazardous substances that exceed the RQs set forth in 40 CFR Part 302 will continue to be subject to those CERCLA reporting regulations, as well as any reporting requirements under this rule. UST releases of hazardous substances that are less than the reportable quantity will be subject to the release reporting requirements in the final published version of today's proposed regulations.

These provisions of CERCLA will not impact the vast majority of UST facilities because most facilities store only petroleum and thus are not subject to CERCLA requirements. However, for UST facilities storing regulated hazardous substances, certain releases will continue to be subject to CERCLA requirements as well as the final published version of today's proposed rules.

B. Hazardous Waste Tank Program

Under RCRA Subtitle C, EPA has promulgated regulations for UST systems containing hazardous wastes (40 CFR Part 264, July 14, 1988). The RCRA Subtitle I rules proposed today will, when finalized, apply to USTs containing hazardous substances.

These regulated substances include hazardous substances defined in section 101(14) of CERCLA, except for hazardous wastes regulated under Subtitle C and petroleum. The exclusion of hazardous wastes within the definition of regulated substance avoids most of the overlapping jurisdiction of Subtitle I and Subtitle C. An overlap in jurisdiction does exist, however, for USTs containing petroleum wastes that are subject to the provisions of RCRA 3014. This overlap is discussed in the next section. There is also a potential overlap in jurisdiction for USTs containing mixtures of petroleum and hazardous wastes. Today's proposal resolves this potential overlap by excluding such USTs from the universe of USTs subject to the proposed requirements. Unless otherwise exempted, such USTs would be subject to the requirements of Subtitle C. It is intended that the final rules resulting from today's proposed rules will regulate, for the most part, a different set of UST systems from those regulated under Subtitle C.

C. Used Oil Regulations

Underground tanks storing used oil (e.g., automobile and truck used crankcase oil) are under the jurisdiction of Subtitle I. Pursuant to section 9001(2)(B) of RCRA, underground tanks containing "petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure " are within the scope of Subtitle I. Thus under Subtitle I requirements, owners and operators of UST systems containing used oil were required to notify designated state agencies of the presence of such tanks by May 8, 1986. Owners and operators of newly installed used oil UST systems are subject to the requirements of the Interim Prohibition, which has been in effect since May 7, 1985.

Under Subtitle C of RCRA, EPA also has the authority to regulate recycled oil, and to regulate used oil that is disposed of under Subtitle C if such oil is identified or listed as a hazardous waste. Under the authority of Subtitle C of RCRA, EPA proposed to list used oil as hazardous waste (50 FR 49269-49279, November 29, 1985) and has proposed standards for recycled oil (50 FR 49250-49258, November 29, 1985). Since publication in the Federal Register, several important decisions in terms of these proposed rulemakings have been made, namely:

1. Storage of used oil (even when recycled) will be regulated,

2. Recycled oil will not be listed as a hazardous waste (51 FR 41600, November 19, 1986).

The Agency is proposing today to defer application of the technical requirements to used oil UST systems.

This is discussed in further detail in Section VI.A.4(c).

D. Stage II Vapor Recovery Program

The Agency is in the process of conducting rulemaking proceedings to decide whether and how to regulate vehicle refueling emissions. Under consideration are Stage II controls (which would be applied to gasoline pumps) or onboard canisters (which would be part of automobiles). The Agency has not yet made a decision as to which method to adopt for control of these emissions. If at some time EPA should decide to call for Stage II systems as a means for controlling emissions, the Agency would examine the interaction of these requirements with the UST Program.

E. SPCC

Under section 311 of the Federal Water Pollution Control Act, EPA has promulgated regulations for the prevention of and response to oil spills into navigable waters. These rules (40 CFR Part 112) known as the Spill Prevention Control and Countermeasure (SPCC) regulations are intended to prevent and contain releases of oil into surface waters which are navigable. Comparatively few UST systems are subject to SPCC regulations. Only those tanks of greater than 42,000 gallons capacity that are located near navigable waters of the U.S. or adjoining shorelines may be affected. Releases from these UST systems must reach navigable waters or shorelines to be subject to SPCC response actions. For those comparatively few UST systems meeting the volume and location requirements indicated above, both today's proposed rules and the SPCC rules apply.

F. DOE High-Level Radioactive Waste Program

Under the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.) the U.S. Department of Energy (DOE) has promulgated rules for the management of high-level radioactive waste resulting from atomic energy defense activity. DOE Orders 5480.1, 5480.2, and 5602.2 regulate the underground tank storage of these wastes including corrective actions in the event of a release.

The UST rules proposed today include radioactive waste because any radionuclide is a "hazardous substance" under CERCLA. However, in view of the differences in high-level radioactive waste from other RCRA Subtitle I regulated substances and the much larger tanks storing this waste, EPA is proposing to defer from today's
proposed rules the DOE radioactive waste facilities. Until a determination is made as to whether, and how, the proposed UST rules should apply to DOE facilities storing high-level radioactive wastes, the proposed UST rules and requirements, except corrective action and the interim prohibition requirements, do not apply to these facilities. More details are provided on this in Section VI.A.4(e).

IX. ECONOMIC AND REGULATORY IMPACTS

Section IX.A. discusses the Regulatory Impact Analysis of this proposed rule, as required by Executive Order 12291. Section IX.B. then discusses the analysis of the effects of the proposed rule on small businesses, as required by the Regulatory Flexibility Act. Requirements under the Paperwork Reduction Act are addressed in Section IX.C.

A. Regulatory Impact Analysis

1. Executive Order 12291

Executive Order 12291 (46 FR 13193, February 19, 1981) requires regulatory agencies to conduct a Regulatory Impact Analysis (RIA) for any major rule. A major rule is one likely to result in (1) an annual cost of $100 million or more, (2) a major increase in costs or prices for consumers, individual industries, federal, state or local government agencies, or geographic regions, or (3) significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of United States-based enterprises to compete in domestic or export markets.

EPA has conducted an RIA to compare several regulatory alternatives for USTs, as explained in the following sections. The RIA provides an analysis based on the guidelines contained in the Office of Management and Budget’s “Interim Regulatory Impact Analysis Guidance” and EPA’s “Guidelines for Performing Regulatory Impact Analysis”.

Based on the results of this analysis, the Agency has concluded that this proposed regulation is a major rule which produces significant net benefits to society. Average annualized costs are $210 million, which include incremental costs of installing and maintaining USTs, incremental detection and monitoring costs, incremental tank removal and replacement costs, incremental pipe repairs, and adjustments for value of product lost. Based on an existing population of 1.4 million USTs, as specified in Section II.B. of this Preamble, this corresponds to an annualized cost of $150 per UST. This increased expenditure of $150 per UST produces significant benefits due to both the prevention of releases from UST systems that otherwise would have gone undetected, as well as earlier detection of releases.

If it is assumed that the benefits of either preventing an aquifer from becoming contaminated or reducing the amount of contamination (due to earlier detection) are equal to the costs of corrective action avoided, annualized benefits are on the order of $1.53 billion or $1100 per UST. However, each potential corrective action must be evaluated on its own merits, as explained in Sections V.A.3. and V.B.4. of this Preamble. Due to the case-by-case nature of these cleanup decisions, it was not possible to quantify the precision with which a cost of corrective action avoided approach approximates benefits.

The purpose of Section IX.A.1. is to summarize the intent and findings of the RIA. Section IX.A.2. discussed the basic approach taken in the RIA, and specifies the regulatory alternatives analyzed. Section IX.A.3. lists the industries projected to be affected by the proposed action, and Section IX.A.4. discusses the methodologies employed in the cost, effectiveness, benefits, and economic impact analyses. Section IX.A.5. reviews the results of the cost effectiveness and economic impact analyses. The full draft RIA is available as part of the background documents supporting this proposed regulation. This proposed rule was submitted to the Office of Management and Budget for review, as required by Executive Order 12291.

2. Basic Approach/Regulatory Alternatives

A principal goal of Executive Order 12291 is to ensure that a regulation confers net benefit—that is, that the benefits of a regulation outweigh its costs to society. A second goal is that a regulation be cost-effective—that is, to ensure that a regulation is not selected if, among the group of feasible regulatory alternatives, there is an approach that is expected to confer benefits at least as high as the proposal but at lower costs or to confer greater benefits than the proposal but at no greater cost. The RIA supports these goals by providing a systematic presentation of information on benefits, costs, and economic impacts in a way that clarifies the implications of alternative regulatory approaches. In addition to serving as a tool for selecting from among alternatives, the RIA process can also prove useful in developing new regulatory alternatives. However, ultimate selection of a regulatory alternative must be consistent with statutory directives.

The EPA has specific guidance regarding the contents and conduct of RIAs. The key elements of an RIA are:

1. Stating the need for and consequences of the proposal;
2. Considering alternative approaches;
3. Assessing benefits;
4. Assessing costs; and
5. Evaluating costs and benefits.

These components are interdependent; for example, stating the need for the proposal, considering alternative approaches, and assessing costs all depend critically on understanding the base case in the absence of regulation. Thus, each part of an RIA must be developed with the others in mind.

Certain data input and analytical steps occur more than once in addressing the key questions posed in an RIA.

The difficulties in preparing an RIA that will answer this broad array of interlocking questions are compounded by the complexity of the regulated universe and the large combination of approaches available for reducing damages. The proposed rule addresses the problem of leaking USTs by regulating several distinct groups of tanks: existing tanks and replacement tanks, including those used for petroleum and hazardous substances. The proposed rule employs a combination of approaches designed to reduce damages from these disparate populations including: Prevention of releases; early detection to minimize releases both from tanks and piping systems; and corrective action to reduce the impact of those releases that do occur.

The analytical problems posed by these goals and constraints are best addressed by combining as many of the analytical issues as possible into a single framework. That framework is the UST Model, a computer simulation model designed to yield estimates of releases and life-cycle costs for the entire UST universe. The use of this model ensures that, to the greatest extent possible, all of the data and assumptions required will be consistent across the analyses that go into the RIA. The cost outputs from the model include UST repair and replacement, detection and monitoring costs, value of product lost, and corrective action costs. Effectiveness measures include plume areas and durations that result for the leaks that occur during the period they remain undetected. The design and operation of this model are discussed in more detail in the RIA.

It was not practical to include all of the analysis directly in the UST model. Some important issues, including the
effects of the regulatory costs on businesses, risk reductions, and some other measures of benefits, were analyzed separately. However, these analyses were based on outputs from the UST model. For example, the UST model provides outputs regarding floating plumes and their duration. That information was then used in the risk analysis to characterize the dispersed plumes that resulted from the floating plumes, to provide a basis for assessing health risks due to ingestion of contaminated water.

Grouping of Potential Actions into Distinct Options. As discussed in detail in Section V of this preamble, many actions can be taken to reduce damages from leaking USTs. They can be aimed at existing tanks, at new tanks, or at releases that have already occurred; from leaking USTs. They can be aimed at reducing health risks due to ingestion of plumes, to provide a basis for assessing environmental impacts of USTs at existing tanks, at new tanks, or at releases that have already occurred; from leaking USTs. They can be aimed at reducing health risks due to ingestion of plumes, to provide a basis for assessing environmental impacts of USTs.

Tanks are assumed to be replaced with coated and cathodically protected tanks with line leak detectors, and other quarterly vapor well monitoring or tightness tests every 5 years.

Steps assumed to be taken in response to a release are the same for this option as for all others. Where a release has occurred, an investigation and actions to reduce immediate hazards is followed by limited removal of contaminated soil, removal of any free product from the ground water, and ground-water cleanup at 40 percent of sites where ground water has been contaminated.

OPTION II—the Proposed Rule (Enhanced baseline plus targeted upgrading) is similar to Option I with upgrading to new tank standards within 10 years, though leak detection systems must be sampled monthly rather than quarterly. Quarterly, infrequent tightness tests are not permitted after tanks are replaced. For modeling purposes, operators are assumed to retrofit with cathodic protection and monthly vapor wells to meet new tank standards after 8 years. Replacement tanks are assumed to be coated and cathodically protected, with vapor wells sampled monthly.

OPTION III (Baseline plus secondary containment for new tanks) requires periodic leak detection for existing tanks and secondary containment with interstitial monitoring for new tanks. For existing tanks, this option was assumed to be identical to Option I; replacement tanks are assumed to be lined systems with interstitial monitoring.

OPTION IV (Class option) requires periodic replacement of existing tanks and secondary containment for replacement tanks at state-designated wellhead protection areas. Tanks in other areas are required to conform to baseline standards (Option I). It is assumed that 40 percent of the tank population is located within a wellhead protection area. Tanks located in these state-designated areas are assumed to be fitted with continuous vapor wells after one year, and then replaced before the fifth year with protected tanks in liners. The other 60 percent of tanks (those outside wellhead protection areas) are modeled the same as Option I. As in other options, ground water is cleaned up at 40 percent of sites where the release has reached ground water; all of these cleanups are assumed to be performed in the wellhead protection areas.

OPTION V (Emphasis on Prevention). For existing tanks, this option requires manual inventory control, frequent leak detection starting in 3 years, and early retirement. Replacement tanks must have secondary containment. Half of all existing tanks are modeled with continuous vapor well monitoring, and half are modeled with monthly vapor well monitoring and 3-year tightness tests. Existing tanks are replaced with lined systems either when they fail, or after 8 years.

3. Affected Industries

EPA has identified 3 classes of tank-owning facilities that would be directly affected by this proposed rulemaking: (1) facilities using USTs for storing motor fuels for the retail market; (2) facilities using USTs for storing fuels for non-retail purposes; and (3) facilities using USTs for storing regulated hazardous substances. The major sector to be affected by this regulation is the motor fuel retailing sector. There are approximately 193,000 outlets selling motor fuel. Owners for these outlets range from the largest oil refiners to small independent operators.

Facilities using USTs for storing fuel for non-retail purposes cut across many sectors of the economy, both private and non-profit. Affected sectors include agriculture, mining and construction, manufacturring, utilities and transportation, wholesale trade, retail trade, services, governments, and non-profit organizations. Generally, such USTs are used to service in-house vehicle fleets.

Facilities using USTs for storing regulated hazardous substances are somewhat more limited to certain sectors of the economy. EPA has tentatively identified the following industries as owning the greatest number of chemical tanks: Industrial Inorganic Chemicals (SIC 2819); Plastic Materials and Resins (SIC 2833); and Allied Products (SIC 2851); Industrial Organic Chemicals (SIC 2869); Chemical Preparations (SIC 2899); Plating and Polishing (SIC 3471); Chemical Wholesalers (SIC 5161); Petroleum Bulk Stations and Terminals (SIC 5171); Petroleum Product Wholesalers (SIC 5172); and Drycleaning Plants (SIC 7216).

Economic impacts are far more likely to be significant for the retail fuel market than for the other two classes mentioned above. Reasons for this include: (1) There are no substitutes for USTs at a retail fueling facility; [2] there

12762  Federal Register / Vol. 52, No. 74 / Friday, April 17 1987 / Proposed Rules
are many outlets owned by small businesses and (3) there tend to be at least 3 USTs per facility, so UST costs represent a significant fraction of capital and operating expense. Thus, the economic analysis has focused on the retail motor fuel sector. Because the types of facilities in classes other than retail motor fuel are so diverse, and the potential for economic dislocation less significant (as will be discussed in Section IX.5.b.), detailed characterizations of facility types in classes other than retail motor fuel have not been developed as part of this analysis.

<table>
<thead>
<tr>
<th>Table 4.</th>
<th>OWNERSHIP AND OPERATION OF RETAIL MOTOR FUEL OUTLETS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td>Number of outlets owned and operated</td>
</tr>
<tr>
<td>Refiners</td>
<td>27</td>
</tr>
<tr>
<td>Jobsbers</td>
<td>8,766</td>
</tr>
<tr>
<td>Convenience stores</td>
<td>516</td>
</tr>
<tr>
<td>Independent Chains</td>
<td>125</td>
</tr>
<tr>
<td>Open dealers</td>
<td>80,304</td>
</tr>
<tr>
<td>Total</td>
<td>89,736</td>
</tr>
</tbody>
</table>

Cost Elements. The major categories of costs include: (1) initial facility costs (includes obtaining and installing new tanks); (2) detection and monitoring costs; (3) value of product lost; (4) tank removal and replacement, and pipe repairs; and (5) corrective action costs. Cost element 1 applies only to new tanks. Cost element 2 applies to all tanks. Cost elements 3, 4, and 5 apply only to leaking tanks: All costs are based on best available engineering estimates. Only cost elements affected by the proposed rules are analyzed.

Tank Universe. Descriptive data on the tank universe comes primarily from studies by EPA contractors, Census data, and industry sources. Key assumptions include number of tanks, age distribution, the distribution of hydrogeologic settings, and the number of new tanks installed annually. These are documented in the Regulatory Impact Analysis.

Accounting Framework. Costs are estimated on a present value basis, based on costs incurred over a 30-year modeling period starting at the time of promulgation. The real discount rate used for the analysis is 3 percent per year. In the base case, tanks are assumed to last until leaks are detected, so the time horizon for operation and maintenance costs for existing tanks varies with each tank modeled. The cost of installing a replacement for each tank that fails and operating that tank up to the end of the 30-year time horizon is calculated for all tanks. All costs are presented on a pre-tax basis, so as to best capture the real resource costs to society.

4. Methodology Employed

This section specifies the methodologies used in this analysis. Methodologies are presented for costs, effectiveness, benefits, and economic impacts.

a. Cost Estimation Methodology. Estimating the costs of the proposed regulation requires the following: (1) Base case specification (i.e., from where are costs counted?); (2) cost element specification (i.e., which costs per tank are counted?); (3) tank universe specification (i.e., how many tanks are affected and how is this universe distributed over the relevant characteristics that affect costs and effectiveness?); and (4) accounting framework for costs (i.e., how are costs counted?). These are addressed in turn.

Base Case. The base case represents the point from which incremental costs and benefits of the proposed regulation will be estimated. The base case for this analysis is the status quo under the 1984 RCRA Reauthorization Amendments, which includes the Inert Prohibition against installing new bare steel tanks in corrosive settings. Any upgrading beyond this is included as a regulatory cost, even if such upgrading were voluntary. This ensures that regulatory costs are not understated.

Cost of contaminated ground water that is avoided due to a regulatory option. The underlying assumption is that benefits are directly proportional to area avoided.

For any given regulatory option, costs and effectiveness are modeled through the UST model. The UST Model provides a systematic basis for evaluating how different regulatory options would be expected to reduce the damages that motivate regulation. The UST Model provides information about the performance of different combinations of tank types and detection methods in different hydrogeologic settings. The cost outputs include the costs associated with product loss, UST repair and replacement, detection and monitoring, and corrective actions. The costs of damages include plume areas and durations that result from the leaks that occur during the period they remain undetected. Thus, costs and effectiveness of any regulatory option are modeled by estimating costs and damages associated with the base case, costs and damages associated with the regulatory option, and subtracting. 

b. Effectiveness Estimation Methodology. To the extent feasible, the benefits of today's proposed rule are estimated by predicting the reduction in damages which would occur if it were implemented, compared to a base case of no further regulation. There are numerous difficulties in estimating damage reductions, stemming partly from the large number of potentially important types of damages USTs can cause, partly from the difficulties in measuring and predicting damage reductions, and partly from the problems of valuing in dollars many of the most important damages.

In light of these difficulties, the approach used in measuring benefits is to estimate the monetary damages avoided by the regulatory options, and to supplement this with estimates of other avoided damages (such as damage to the health of individuals exposed to released products, and option/existence value of ground water) that are very difficult to express in monetary terms. Three basic steps must be taken to estimate monetary damages from leaking USTs: (1) Identification of the types of damages; (2) valuation in dollars of the damages estimated to occur; and (3) estimation of the frequency and extent of the different types of damage. In-depth studies of actual cases of damage from USTs were used to develop data for the first two steps. UST Model simulations were combined with data from EPA's State.
Release Incidents Survey for estimates of the frequency of damage incidents under the base case and under the regulatory options.

Forty-four case studies of UST release incident damages were used to identify the types of damages caused by leaking USTs and place monetary values on some of the major types of damage. Damages were valued in dollars by estimating the actual sums spent to repair damages caused by releases (e.g., replacing contaminated wells, compensation for damaged structures) plus the losses to businesses closed or disrupted by the releases and the contamination they caused. The advantages of this approach include: (1) Damaged parties may identify damages that would otherwise be overlooked; (2) reported damages are "real" rather than abstract; (3) damaged parties may be able to provide monetary estimates of the damage costs; and (4) damaged parties can indicate intangibles.

There are disadvantages to this approach, however. The case study selection process probably identified and profiled incidents causing more damage than is typical from a release. Consequently, the findings must be interpreted with caution. Because they are not typical or average cases, scaling them up to estimate nationwide total damages may not accurately reflect benefits.

Given a distribution of monetary damages associated with serious release incidents, total damages are calculated using estimates of the number and size of leaks under the base case, the proposed rule, and various regulatory options. These estimates are made using the UST Model of tank system failures and releases. Data from the State Release Incidents Survey provide estimates of frequency with which releases of various sizes are likely to have serious consequences (e.g., lost drinking water, or vapor contamination). UST Model predictions of the timing of the damage incidents are used to discount the monetary damages back to the implementation time of the regulations, providing estimates of the present value of the damages.

The risks avoided by the proposed rule were not considered in the same framework discussed above, due to the problem of valuing health risks. Instead, the UST Model's outputs in terms of predicted frequencies and magnitudes of contamination incidents were used as inputs into a separate analysis of the concentrations of carcinogens at various possible exposure points, the size of the exposed populations, and the duration of exposure. The UST Model, linked to a ground-water transport routine, provided all inputs except estimates of the size of the exposed population at different exposure points. The exposure estimates were made using estimates of private and public well distributions relative to USTs, based on nationwide Census data supplemented with in-depth case-by-case mapping exercises.

Other categories of benefits not readily amenable to valuation in dollars include aesthetic value, community value, and existence value. Although a contingent valuation approach provides some hope for ultimately being able to monetize such phenomena, such analysis has not yet been conducted. EPA invites comment on the general issue of benefits assessment of today's rule. EPA is particularly interested in comments regarding the valuation issues addressed above. The benefits analysis conducted to date is contained in the RIA.

d. Economic Impacts Estimation Methodology. Economic impacts result from the costs attributable to the regulatory alternative. The EPA guidelines for performing regulatory impact analysis recommend an analytical approach based on combined financial and market analysis, consisting of the following steps: (1) Segment the regulated industry into groups by relevant characteristics; (2) perform baseline financial analysis on segments or on model plants; (3) separate resource costs from transfers, such as taxes, that distribute the costs to parties other than the directly regulated community; (4) estimate effects of cost pass-throughs, including the assumption (and estimated likelihood) of no pass-through; and (5) where data allow, perform discounted cash flow analysis or return-on-investment analysis. The results will estimate the impacts of regulatory costs on firm or facility revenue and profit for the segments of the regulated industry. This is the basic approach employed in this Regulatory Impact Analysis.

According to the EPA guidelines, the general framework to be used is based on the static partial equilibrium model of supply and demand relationships in the affected markets. In this model, if regulations on suppliers increase the costs of providing a particular good or service, the market price of the affected good or service will increase and the amount provided to the market will decrease at any given price (i.e., the supply curve will shift upwards). In the short run, increased variable costs will determine the extent of supply curve shifts, though in the long run, fixed costs will also affect supply. The magnitude of the effects will depend on the relative sensitivity of supply and demand to changes in price (that is, the price elasticities of supply and demand). Economic effects (i.e., changes in profitability, plant closures, employment, inflation, capital availability, etc.) all flow from the changes in prices and quantities predicted by appropriate shifts in supply/demand schedules within the partial equilibrium framework. At a minimum it is helpful to examine the bounding cases of perfectly elastic demand (full absorption) and perfectly inelastic demand (full pass-through).

For the 3 classes affected (i.e., retail motor fuel USTs, non-retail motor fuel USTs, and hazardous substances USTs), the extreme case of full cost absorption is likely to be of most concern. This is the case because within any sector, UST regulatory requirements will not affect establishments uniformly. For example, for retail motor fuel, UST regulatory costs are independent of the quantity of gasoline pumped. Therefore, regulatory costs per gallon are likely to be much less for high volume stations, thus limiting the potential for pass-through.

Thus, economic impacts analysis focuses on the extent to which the proposed regulation will affect the viability of firms. A return on assets approach is used in this analysis as the baseline measure of viability. Return on assets was chosen because the rate of expected return on assets is reasonably consistent across size classes and across industries. Furthermore, documented benchmarks exist which correspond to likely failure and severe financial distress.

As with any environmental regulation, adverse economic effects on the industries directly affected are offset somewhat by potential economic gains for industries providing the goods and services as required by the proposed regulation. In this case, tank manufacturers, providers of leak detection equipment and services, and corrective action providers stand to gain from the proposed regulation. However, EPA's Guidance on Executive Order 12291 suggests that the economic impacts analysis should focus on the primary industries affected, not on those receiving secondary economic benefits.

That is the approach followed in this regulatory impact analysis.

5. Results

a. Analysis of Cost and Effectiveness of UST Regulatory Options

This section presents and discusses cost-effectiveness exhibits showing the results of the analysis of the proposed rule and the alternative regulatory
options. The analysis shown is for the nation as a whole, considering the distribution of tank characteristics by age and hydrogeologic setting. All costs shown are for a population of 1.4 million tanks. Costs are for a 30-year period and are discounted at 3 percent.

The corrective action costs were calculated assuming the floating plume and some contaminated soil are removed at all sites where there is ground-water contamination (50 percent of releases are assumed to result in ground-water contamination). In addition, the dispersed plume is removed at 80 percent of all sites where there is ground-water contamination, on the assumption that at 40 percent of all sites with ground-water contamination, a leaking facility will threaten a nearby ground-water well. Actual costs for corrective actions will differ from those presented here depending on the frequency that extensive cleanup actions are actually judged to be needed under site-specific criteria.

The analysis shows that the proposed rule and all of the alternative options could provide a great degree of protection relative to a "no further regulation" base case. The results could also be used to identify the most effective and least costly option. The reader must be cautioned, though, that the use of the analysis could be misleading because the ordering of the options in terms of cost and effectiveness is quite sensitive to changes in assumptions (e.g., assumptions about the effectiveness of detection methods). In addition, the identity of the apparent "low cost option" for technical standards is significantly affected by assumptions regarding the appropriate level of corrective action. Sufficient information is not yet available to ensure that the assumptions used in the analysis adequately reflect reality. The sensitivity of the results to changes in some key assumptions is presented further below. EPA is currently pursuing additional analyses where analytical results are sensitive to such key assumptions. EPA also invites comment on these issues.

**TABLE 5:** Cost and Effectiveness of Options: No Corrective Action

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Total Present Value Cost</th>
<th>Annualized Cost (Billions of Dollars)</th>
<th>Plume Area Avoided Relative to Base (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base case</td>
<td>31.0</td>
<td>1.59</td>
<td>0</td>
</tr>
<tr>
<td>(No further regulation)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Today's proposal (Original Option II)</td>
<td>35.0</td>
<td>1.79</td>
<td>67</td>
</tr>
<tr>
<td>Regulatory Alternatives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Option I</td>
<td>33.0</td>
<td>1.66</td>
<td>54</td>
</tr>
<tr>
<td>(Baseline level of regulation)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Option II</td>
<td>43.0</td>
<td>2.19</td>
<td>55</td>
</tr>
<tr>
<td>(Stringent for new tanks)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Option IV</td>
<td>45.0</td>
<td>2.30</td>
<td>68</td>
</tr>
<tr>
<td>(Classes)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Option V</td>
<td>58.5</td>
<td>2.88</td>
<td>83</td>
</tr>
<tr>
<td>(Stringent)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Annualized costs calculated from present total value of all capital and operating costs, smoothed over 30 years at 3%. Sensitivity analysis factor is 0.05% of total present value costs.

The main reasons for this improvement are the inventory control and periodic monitoring requirements for existing tanks in each option. Any program requiring at least inventory control in combination with periodic leak monitoring will alleviate a large portion of the potential damage from leaking underground storage tanks. Base detection (reflecting primarily sensory perception with some crude inventory control) is assumed to detect releases greater than 1.5 percent of monthly throughput. Inventory control is assumed to detect releases greater than 0.5 percent of monthly throughput, though only 25 percent of the time. Tank tightness tests are assumed to detect releases greater than 0.15 gallons per hour 90 percent of the time. Vapor wells are assumed to detect 70 percent of all releases. Effectiveness assumptions for other leak detection methods are detailed in the RIA. The more protective options are generally shown to have greater total present value costs, since they require earlier and more expensive upgrading of existing tanks. Today's proposal (originally Option II) ranks high in both effectiveness and cost minimization, partly because tank upgrading is a cost-effective means of minimizing releases from existing tanks.

**TABLE 6:** Cost and Effectiveness of Options: With Corrective Action Costs

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Total Present Value Cost</th>
<th>Annualized Cost (Billions of Dollars)</th>
<th>Plume Area Avoided Relative to Base (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Case</td>
<td>120.8</td>
<td>8.5</td>
<td>0</td>
</tr>
<tr>
<td>(No Further Regulation)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Today's Proposal (Option II)</td>
<td>94.8</td>
<td>4.94</td>
<td>67</td>
</tr>
<tr>
<td>Regulatory Alternatives</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Option I</td>
<td>113.8</td>
<td>5.91</td>
<td>54</td>
</tr>
<tr>
<td>(Baseline Level of Regulation)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Option II</td>
<td>118.8</td>
<td>6.05</td>
<td>55</td>
</tr>
<tr>
<td>(Stringent for New Tanks)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Option III</td>
<td>67.1</td>
<td>4.66</td>
<td>68</td>
</tr>
<tr>
<td>(Classes)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Option V</td>
<td>97.1</td>
<td>4.95</td>
<td>53</td>
</tr>
<tr>
<td>(Stringent)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Annualized costs calculated from present total value of all capital and operating costs, smoothed over 30 years at 3%. Sensitivity analysis factor is 0.05% of total present value costs.

Options II and V are shown to be the most cost-effective options, though the differences among options are relatively small and quite sensitive to a number of uncertain assumptions. The performance of these two options illustrates the effectiveness of early retirement or upgrading of bare steel tanks, and frequent leak detection. The relative cost-effectiveness of Option V also illustrates that the most effective regulatory alternatives can, in fact, be the least costly in the long run because effective leak detection and early retirement and replacement of bare steel tanks with corrosion protected tanks eliminates a large proportion of potential corrective action costs. This result, of course, depends on the level of corrective action assumed to be appropriate.

Option III is the most costly alternative because tanks are replaced with secondary containment only after they leak. Corrective action costs are higher than the corrective action costs for the options requiring mandatory retirement. Option III also has high facility costs due to the secondary containment requirement for new tanks. Option III is, however, effective; it may eliminate 80 percent of the potential plume area. It is more costly than other options which have the same relative effectiveness.

**Sensitivity of Results to Assumptions.**

The cost-effectiveness of the options is strongly affected by several of the assumptions used in the analysis of the options.
One important source of uncertainty in predicting the effects of the options is that many options allow choices. Option I, for instance, allows either quarterly vapor wells or tightness tests every five years. The analysis assumed that half of tank owners choose each method, but there is no way to be sure how the owners would actually choose. These choices are important because the two methods are substantially different in cost and effectiveness. If 100 percent vapor wells were chosen, and if vapor wells were as reliable as assumed in the modeling (able to detect 70 percent of releases) Option I would be less costly than any other option, even considering the cost of corrective action. This result is, however, sensitive to unverifiable assumptions about the operation of vapor wells.

The assumed effectiveness level of leak detection or leak monitoring alternatives has a direct effect on the results of the analysis. If leak detection is assumed to be effective and reliable, it can be shown to be highly cost-effective. On the other hand, if more conservative assumptions are made concerning its performance, it can be shown that options that protect against releases with more certainty (e.g., early retirement and secondary containment) are more effective. For example, if the proposed regulation is run through the model assuming all UST's use vapor wells and that those vapor wells detect 70 percent of releases, 68 percent of base case plume area is avoided. If vapor wells are assumed to detect 90 percent of releases, 70 percent of base case plume area is avoided. If vapor wells are assumed to detect 50 percent of releases, 59 percent of base case plume area is avoided. Additional sensitivity analysis is presented in the RIA.

The level of corrective action required and the estimated cost of corrective action will affect both the absolute cost of the options and the relative cost between options, as discussed in Sections V.A.5. and V.B.4. As corrective action costs increase, the absolute cost of the options increase. Also, increasing the estimated costs for corrective action will cause options requiring frequent leak detection or early retirement for existing tanks and secondary containment for new tanks to appear to be relatively more cost effective. At present, corrective action costs used in the model range from $28,000 to $388,000, with $140,000 being the corrective action cost for responding to the median plume.

A particularly important assumption, in light of its prominence in the proposed rule, is that retrofitted cathodic protection will stop localized corrosion of bare steel tanks, allowing them to perform virtually as well as new tanks, as discussed in Section VII.E.b. Other assumptions that could affect the results include assumptions about the mix of hydrogeologic settings in which tanks are found, the discount rate used in computing present value costs, and the frequencies and costs associated with "false alarms," in which a detection method erroneously indicates that a system is leaking. Sensitivity analyses for these various assumptions are presented in the RIA.

As stated previously, EPA is pursuing additional analyses to help clarify some of these issues raised above. EPA invites comment on these issues.

b. Analysis of Economic Impacts

Economic impacts need to be considered for 3 previously mentioned classes of facilities using USTs: (1) facilities using USTs for storing motor fuels for retail marketing; (2) facilities using USTs for storing petroleum products for purposes other than retail motor fuel marketing; and (3) facilities using USTs for storing regulated hazardous substances.

Economic impacts are far more likely to be significant for the retail motor fuel marketing class than for the other two classes mentioned above. As stated previously, reasons for this include: (1) There are no substitutes for USTs in retail motor fuel marketing; (2) there are many outlets owned by small businesses; and (3) there tend to be at least 3 USTs per facility, so UST costs represent a significant fraction of capital and operating expense. Thus, the economic analysis has focused on the retail motor fuel marketing sector.

Economic impacts have been assessed for the retail motor fuels marketing class using a return on assets measure, as discussed in Section IX.A.4. That analysis has shown that, under the assumptions of no revenue increase per facility and limited ability of small firms to get loans to cover compliance-related costs, the burden on small firms could be significant. Because it is likely that small firms would bear a large share of the economic impact, these potential economic effects are discussed further in Section IX.B. (Regulatory Flexibility Act).

For the class of facilities using USTs for non-retail motor fuel storage, the option expected to dominate is retrofitting USTs and purchase motor fuel at retail. Thus, there are limits on the burden these facilities will face due to UST regulatory requirements. Furthermore, because these USTs are used primarily to fuel in-house vehicle fleets, and larger firms are probably more likely to maintain such fleets than smaller firms, smaller firms are not likely to be significantly represented among the class of firms using USTs for non-retail fuel storage. EPA has not yet been able to discover or develop definitive data which specifies how firms using USTs for non-retail motor fuel storage are distributed over size classes. Therefore, EPA invites comments on this issue.

There are additional reasons why EPA believes the non-retail fuel marketing classes will bear less significant economic impacts than the retail motor fuel marketing class. First, only a fraction of the firms in any given industry are identified as using USTs for non-retail motor fuel. In many cases, this fraction is less than five percent. Second, available data suggest that the average number of non-retail motor fuel USTs per establishment is less than 3. Third, USTs represent a smaller fraction of total capital stock for these industries than they do for the retail motor fuel marketing industry. Therefore, UST regulations are less likely to significantly affect return on assets.

Although facilities in this class can largely avoid the potential of significant regulatory burden by ceasing to use USTs and switching to retail purchase of fuel, there is one burden that cannot be avoided by such a switch. Existing leaks will require corrective action as part of tank closure. However, to the extent that businesses owning such facilities are typically larger than the smallest retail motor fuel outlet owner, this impact is likely to be less severe.

Economic impacts on facilities using USTs to store regulated hazardous substances are also expected to be less significant than economic impacts on motor fuel retailing facilities, for reasons similar to those for non-retail fuels.

First, for the ten chemical UST-intensive industries mentioned previously, the percentage of facilities in the industry owning chemical USTs ranges from 1 percent to 40 percent. This suggests the existence of substitutes for chemical USTs. Such substitutes include aboveground tanks, drums (especially for small businesses), and process changes. As one example of substitution, a switch from oil-based paint to water-based paint eliminates the need for solvents, which are often chemicals generally stored in USTs at paint-producing facilities. As another example, chemical USTs at petroleum bulk stations might store additives for gasoline. These additives could be blended in at an earlier point in the
distribution chain. The existence of such alternatives tends to mitigate the potential economic effects of regulations vehicles or off-the-road vehicles are substitutes, so corrective action requirements pose some potential for economic dislocation.

B. Regulatory Flexibility Act

Under the Regulatory Flexibility Act of 1980 (5 U.S.C. 601-612), agencies publishing a proposed or final rule must prepare and make available for comment a Regulatory Flexibility Analysis that describes the potential impact of the rule on small entities (i.e., small business, small organizations, and small governmental jurisdictions). The purpose of the Regulatory Flexibility Act is to ensure that regulations do not impose unnecessary costs or other burdens on such entities. No Regulatory Flexibility Analysis is required if the Agency's Administrator certifies that the rule will not have a significant impact on a substantial number of small entities.

The Agency has examined the potential impact on small entities of the rule being proposed today and has concluded that this regulation will have a significant impact on a substantial number of small entities. The Agency has therefore prepared a Preliminary Regulatory Flexibility Analysis, which is summarized below.

Small Entities Potentially Affected by This Regulation. For this Preliminary Regulatory Flexibility Analysis, the Agency divided the businesses potentially affected by the regulation into two categories: firms engaged in retail motor fuel marketing (e.g., gasoline service stations), and firms owning other USTs. An initial review of these two categories of businesses showed that firms engaged in retail motor fuel marketing included a substantial number of small businesses, including many with fewer than 10 employees and less than $100,000 in net worth. The category of other USTs breaks down into two sub-categories: non-retail petroleum USTs and hazardous substances USTs. A preliminary analysis of the category of businesses owning non-retail petroleum-containing USTs (i.e., those used to store petroleum products that are not retail motor fuel), revealed that such USTs are used for a variety of purposes by a large and diverse group of businesses. The most common uses of non-retail petroleum-containing USTs are to store motor fuel at facilities where fleets of vehicles or off-the-road vehicles are located. For example, the owner of a fleet of busses or a farmer with many gasoline-powered off-the-road vehicles would be likely to have an UST at his or her facility. Owners and operators of non-retail petroleum USTs are found in all sectors of American business, including farming, timber operations, mining, manufacturing, transportation, and wholesale and retail trade; and these owners and operators own and operate firms of all sizes. Similarly, owners and operators of USTs containing hazardous substances are also widely distributed throughout the economy.

Because firms owning non-retail petroleum and hazardous substance USTs fall into hundreds of Standard Industrial Classifications (SICs) and range in size and type from one-person nonprofit organizations to small governmental jurisdictions to major corporations, and because no data are currently available to identify these firms and entities, EPA is placing the primary emphasis of this Regulatory Flexibility Analysis on the retail motor fuel marketing sector. The Agency solicits comments both on the extent of small business ownership of USTs outside the retail motor fuel marketing sector and the industries in which UST-owning small businesses are located.

The Agency believes that, by focusing on the retail motor fuel marketing sector, the Regulatory Flexibility Analysis will identify those impacts of the proposed rule with the greatest potential of significantly affecting a substantial number of small entities. Several characteristics of the retail motor fuel marketing sector support the Agency's decision to emphasize this sector in its Regulatory Flexibility Analysis. First, all of the businesses in this sector must store their product in underground storage tanks; they cannot choose either not to store product or not to store it below ground. Second, this sector of the economy is overwhelmingly dominated by small businesses; it is estimated that more than 3-quarters of all retail motor fuel outlets are owned or operated by small businesses. Finally, data on which to base the analysis are available for this sector in sufficient quantity and quality to ensure that the Regulatory Flexibility Analysis will be reasonably accurate and will capture the most severe small-business impacts likely to occur as a result of the issuance of this proposed rule.

EPA has used a variety of data sources to develop estimates of the number of small businesses engaged in retail motor fuel marketing and to describe the economic and financial characteristics of this sector and these firms. The American Petroleum Institute, the National Association of Convenience Stores, the Petroleum Marketers Association of America, the Society of Independent Gasoline Marketers of America, and the Service Station Dealers of America have assisted EPA by providing data and by suggesting possible data sources. EPA also used data on the small businesses in this sector compiled by the Small Business Administration and the Department of Energy and data made available in many private-sector publications (particularly The Lundberg Letter and National Petroleum News).

For this Regulatory Flexibility Analysis, small businesses in the retail motor fuel marketing segment are defined as firms with less than $4.6 million in annual sales. This is the definition used by the Small Business Administration (SBA) to identify small businesses in this sector, and this annual sales figure has also been shown in EPA's preliminary analysis to reflect an appropriate size cutoff for small firms in this sector. This definition includes all firms in the retail motor fuel marketing sector with two or fewer outlets. Firms with $4.6 million in sales will typically have approximately $500,000 in assets and $500,000 in net worth. The SBA sales-based definition of small business includes those firms most vulnerable to significant economic impacts, and those firms least likely to have insurance to cover their corrective action expenditures. This definition also includes all firms with a net worth less than the costs of replacing 3 tanks or the cost of performing a corrective action that involves ground-water cleanup.

There are two major classes of firms in the small-business segment of this sector: those that own and operate their own outlets and those that operate outlets that they lease. Firms in this latter class are termed “lessee” or “independent” dealers. In the group of firms in this sector owning their own outlets are many “open” dealers, defined as firms owning and operating a single retail motor fuel outlet. EPA estimates that in 1984, small businesses either owned or operated 75 percent of the 193,000 retail motor fuel outlets in the United States. Of this number, open dealers were estimated to own approximately 80,000 or 42 percent of all retail motor fuel outlets. Open dealer firms vary widely in size and age; some open dealers have new outlets, over $500,000 in assets, and $400,000 in...
net worth, while others have older outlets with 30-year-old tanks, only $42,000 in assets and $30,000 in net worth. EPA estimates that the typical open dealer (the statistical median) has $90,000 in net worth, $210,000 in assets, and $14,000 in annual after-tax profits. Such a typical open dealer firm is thus a business earning a reasonable profit and having a reasonable expectation of continuing in business.

In addition to open dealers, small business owners in the retail motor fuel marketing sector include owners of small chains of retail outlets. It is common for owners of small chains to own 2 or 3 retail outlets and also to act as wholesale suppliers for several open dealers. (This business pattern is particularly common in rural areas.) It is also common for firms in this sector to own a chain of several convenience stores (C-stores), some of which do not supply gasoline. For such small C-stores, gasoline sales are not generally the primary line of business. EPA estimates that there were 3,700 such chains owning 8,200 retail motor fuel outlets in 1984.

The Agency estimates that 58,000 retail motor fuel outlets are operated by lessee dealers, whose outlets thus represent 30 percent of all retail motor fuel outlets. The majority of these lessee dealer-operated outlets are owned by large, vertically integrated petroleum firms that engage in production, refining, and marketing, but many are owned by independent marketers who own chains consisting of between 2 and 100 retail motor fuel outlets. The outlets operated by lessee dealers range in characteristics from some of the most modern and efficient outlets in the country to some of the most financially marginal operations in the retail motor fuel marketing sector. EPA estimates that the typical (statistical median) single-station lessee dealer is a firm with $82,000 in assets, $62,000 in net worth, and $6,000 a year in after-tax profits; the typical lessee dealer is thus a very small firm, but one which nevertheless has reasonable profits for the size of the business and a reasonable expectation of continuing in business.

Open dealers, who both own and operate an outlet, will have to meet all of the costs of UST regulations. However, the situation is more complex for lessee dealers because, although the terms and conditions of leases vary widely, the most common arrangement makes the lessee dealer responsible for “sounding the alarm,” i.e., for operating whatever leak detection and inventory control systems have been agreed to by both the owner and the lessee, but not for maintaining or replacing tanks or paying for corrective action. However, EPA is concerned that lessees are attempting to alter these arrangements to increase the responsibilities of lessees by, for example, holding the lessee responsible for releases or requiring the lessee to buy the tanks. In the Preliminary Regulatory Flexibility Analysis, EPA has assumed that the terms of traditional lease arrangements will prevail, and the analysis therefore does not assess the impacts of changes in lease terms on lessee dealers.

However, the analysis does consider cases in which severe economic impacts could cause the owner of a leased outlet to close the outlet and thus force the lessee dealer out of business.

Although the typical open dealer and lessee dealer are sound businesses, there are marginal firms in both categories. A marginal firm is defined as one that is making very low profits or that has an aging outlet and cannot afford to invest any substantial amount of money into this outlet. In time, outlets age and become more marginal, and, as a result, EPA estimates that existing outlets have tended to exit the industry at a rate of 2 to 4 percent per year. Because many of the outlets that close are replaced by new businesses that are small, this 2 to 4 percent exit rate does not necessarily mean that the small business share of the retail motor fuel marketing sector is significantly declining.

Economic Impacts of the Proposed UST Regulations on Small Business. EPA’s Regulatory Flexibility Analysis has focused on the potential impact of the proposed regulation on currently existing retail motor fuel marketing outlets that are owned by small businesses. Today’s proposed regulation will have very little impact on the costs of building new outlets or of entering the retail motor fuel marketing industry. The installation of coated and cathodically protected tanks or fiberglass reinforced plastic (FRP) tanks is standard at facilities that are being constructed today. Further, facilities that are being constructed today tend to have leak detection equipment installed at the time of construction. The costs of these measures add little to the total costs of constructing a new facility. Therefore, while the effect of this regulation may be to force existing outlets owned by small businesses to close, it may also have the effect of presenting an increased opportunity for entry by new outlets meeting today’s regulatory standards, regardless of their size.

To examine the potential economic impacts of the proposed regulation on small businesses, EPA developed an economic impact model that could combine financial and economic data on firms in the industry with cost and probability-of-release data from the Regulatory Impact Analysis to estimate the rates at which existing firms in the retail motor fuel marketing sector leave the industry for reasons unrelated to UST regulations and as a result of business failures caused by these regulations. The economic impact model was used to develop these estimates assuming first that no revenue increase will occur and then that varying levels of revenue increase will occur. The economic impact analysis assumes that small firms will not be able to obtain insurance or to receive support from state UST funds designed to assist small firms to meet the costs of corrective action. Such state assistance might include loans, loan guarantees, insurance, or other programs designed to smooth the regulatory burden over time or over a larger affected population. The assumption that neither the insurance industry nor state funds will be available to assist small firms in meeting their corrective action costs reflects the situation confronted by most small firms today. EPA hopes to encourage both the insurance industry and the states to provide UST coverage for small firms in the future. If such coverage becomes available at a reasonable cost, the adverse impacts on small businesses predicted by the Regularly Flexibility Analysis could be significantly over-estimated.

The most important source of substantial impacts in today’s proposed UST regulation is the cost of corrective action. EPA estimates that the cost of all small businesses owning retail motor fuel outlets would fail if they were forced to meet the full costs of corrective action for a release sufficiently serious to reach ground water. Fourteen percent of all small businesses owning retail motor fuel outlets would fail if they were forced to meet the full costs of corrective action for a release. EPA estimates that the cost of all small businesses owning retail motor fuel outlets would fail if they were forced to meet the full costs of corrective action for a release that does not reach ground water; in this second case, most of the firms that would fail would be considered marginal. If releases requiring a corrective action with average costs occur at the level estimated by the Regulatory Impact Analysis and no revenue increases are possible for small businesses, 10 percent of small firms will fail in each of the first five years as a result of these corrective action costs. A price increase of 5 percent on all goods and services
provided by retail motor fuel outlets would be necessary to enable retail motor fuel outlets owned by small firms to bear the costs of corrective action without failing in significant numbers. A price increase of this magnitude is unlikely, however, because a price increase of only 3 percent would enable these firms' larger competitors to bear the costs of all UST regulations with higher profits than these larger firms have today. With a 3 percent price increase, 3.7 percent of all small firms will fail as a result of corrective action costs in each of the first five years after promulgation. EPA also estimates that corrective action costs may be high enough and frequent enough to cause many independent marketers to close outlets that are operated by lessee dealers. It is possible that these closed outlets might be replaced by newer facilities, which might in turn be operated by lessee dealers.

EPA considered a variety of alternative approaches to the proposed corrective action requirements for USTs, including an exemption for small businesses in this sector. However, the Agency has determined that such an exemption would mean that corrective action requirements for USTs would be necessary to enable retail outlets to bear the costs of corrective action. A regulation that required the replacement of all existing bare steel tanks with double-walled tanks within 3 years would cause the exit of 50 percent of all small businesses in this sector (assuming no revenue increase). The regulations being proposed today include requirements for leak detection for USTs. EPA considers these requirements essential to the success of the UST program, and the costs of leak detection are not estimated to have significant economic impacts on small businesses. The costs of leak detection are relatively small, even compared to the profits of marginal small businesses. For example, tank tightness tests are assumed to cost $500 per test and need only be performed every 3 to 5 years. Further, according to industry sources, inventory control is already commonly practiced by many small firms. For example, most lessee dealers are required to conduct inventory control as a condition of their leases.

C. Paperwork Reduction Act

Pursuant to section 3504(h) of the Paperwork Reduction Act of 1980, the reporting and recordkeeping provisions of today's proposed rule have been submitted to OMB for approval. Comments on these requirements should be submitted to the Office of Information and Regulatory Affairs, OMB, 720 Jackson Place NW., Washington, DC 20503, marked: Attention—Desk Officer for EPA. Should EPA promulgate a final rule, the Agency will respond to comments by OMB or the public regarding the information collection provisions of the rule.

X. REVIEW OF SUPPORTING DOCUMENTS AND REQUEST FOR PUBLIC COMMENT

EPA invites public comments on all aspects of these proposed regulations, including all issues raised in the Preamble. In preparing this proposal, the Agency has used several sources of data. These sources have been placed in the rulemaking docket, which may be inspected by the public in LG-100, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC, from 9:00 a.m. to 4:00 p.m., Monday through Friday, excluding holidays. Copies of these documents are also available for public inspection and review in the libraries of EPA's Regional Offices.

Comments are solicited in regard to this information, especially their relevance to today's proposed rulemaking. The Agency requests that these comments be submitted by June 15, 1987 to the RCRA Docket Clerk [Docket No. UST-2], Office of Underground Storage Tanks, WH-562, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460.

XI. SCHEDULE OF PUBLIC HEARINGS

The Agency will hold three public hearings on today's proposal. They are scheduled to convene at three different locations and at the dates indicated below:

1. May 28 (and 29, if necessary), 1987—The Westin Hotel, 2401 M Street, NW., Washington, DC 20003
2. June 1 (and 2, if necessary), 1987—The Registry Hotel, 15201 Dallas Parkway, Dallas, Texas 75248
3. June 4 (and 5, if necessary), 1987—Miyako Hotel, 1625 Post Street, San Francisco, California 94015

The hearings will begin at 9:00 a.m., with registration at 9:00 a.m. The hearings will end at 4:30 p.m., unless concluded earlier. Anyone wishing to make a statement at a hearing should notify, in writing, Ms. Helga Butler, Public Participation Officer, Office of Underground Storage Tanks [WH-565], U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460.

Oral and written statements may be submitted at the public hearing. Persons who wish to make oral presentations must restrict them to 15 minutes and are encouraged to have written copies of their complete comments for inclusion in the official record.

List of Subjects in 40 CFR Part 280

Administration practice and procedures, Confidential business information, Hazardous materials, Reporting and recordkeeping requirements, Underground storage tanks, Water pollution control, Water supply.

Lee M. Thomas,
Administrator:
March 29, 1987

For the reasons set out in the Preamble, Part 280 of Title 40 of the Code of Federal Regulations is proposed to be revised as follows:
PART 280—TECHNICAL STANDARDS AND CORRECTIVE ACTION 
REQUIREMENTS FOR OWNERS AND 
OPERATORS OF UNDERGROUND 
STORAGE TANKS

Subpart A—Program Scope and Interim 
Prohibition

Sec. 280.10 Applicability.
Sec. 280.11 Interim prohibition.
Sec. 280.12 Definitions.

Subpart B—New UST Systems: Design, 
Construction, Installation and Notification

Sec. 280.20 Performance standards for new UST systems.
Sec. 280.21 Upgrading of existing UST systems.
Sec. 280.22 Notification requirements.

Subpart C—General Operating 
Requirements

Sec. 280.30 Spill and overfill control.
Sec. 280.31 Operation and maintenance of corrosion protection.
Sec. 280.32 Compatibility.
Sec. 280.33 Repairs allowed.
Sec. 280.34 Maintenance and availability of records.

Subpart D—Release Detection

Sec. 280.40 General requirements for all UST systems.
Sec. 280.41 Requirement for new UST systems.
Sec. 280.42 Additional requirements for piping.
Sec. 280.43 Recordkeeping.

Subpart E—Release Reporting and 
Investigation

Sec. 280.50 Reporting of suspected releases and spills.
Sec. 280.51 Release investigation and confirmation.
Sec. 280.52 Off-site impacts and source investigation.

Subpart F—Corrective Action for UST 
Systems Containing Petroleum

Sec. 280.60 General.
Sec. 280.61 Initial abatement requirements and procedures.
Sec. 280.62 Free product removal.
Sec. 280.63 Additional site investigation.
Sec. 280.64 Soil and ground-water clean-up.
Sec. 280.65 Reporting.
Sec. 280.66 Public participation.

Subpart G—Corrective Action for UST 
Systems Containing Hazardous Substances

Sec. 280.70 General.
Sec. 280.71 Initial abatement requirements and procedures.
Sec. 280.72 Additional site investigation.
Sec. 280.73 Soil and ground-water clean-up.
Sec. 280.74 Reporting.
Sec. 280.75 Public participation.

Subpart H—Out-of-Service UST Systems and Closure

Sec. 280.80 Temporary removal from use, temporary closure, and permanent closure.

Authority: Sections 2002, 9001, 9002, 9003, 9004, 9005, 9006, 9007, and 9009 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended [42 U.S.C. 9002, 9009(b), 6991(b), 6991(c), 6991(d), 6991(e), 6991(f)], 6991(h)].

§ 280.10 Applicability.
(a) The requirements of this Part apply to any owner and operator of an UST system as defined in § 280.12 except as otherwise provided in paragraphs (b) and (c) of this section. Any UST system listed in paragraph (c) of this section must meet the requirements of § 280.11.
(b) Any UST system holding hazardous wastes that are listed or identified under Subtitle C of the Solid Waste Disposal Act, or a mixture of such hazardous waste and other hazardous substances, are excluded from the requirements of this Part. This paragraph does not apply to any UST system containing petroleum.
(c) Subparts A, B, C, D, E, H and I do not apply to any of the following types of UST systems:
(1) Wastewater treatment tanks;
(2) Sumps;
(3) UST systems containing used oil;
(4) Underground bulk storage tanks;
(5) UST systems containing radioactive waste;
(6) Electrical equipment; and
(7) Hydraulic lift tanks.

§ 280.11 Interim prohibition.
(a) No person may install an UST system listed in § 280.10(c) for the purpose of storing regulated substances unless such UST system (whether of single or double wall construction):
(1) Will prevent releases due to corrosion or structural failure for the operational life of the tank;
(2) Is cathodically protected against corrosion constructed of noncorrosive material, steel clad with a noncorrosive material, or designed in a manner to prevent the release or threatened release of any stored substance; and
(3) The material used in the construction or lining of the tank is compatible with the substance to be stored.
(b) Notwithstanding paragraph (a) of this section, if soil tests conducted in accordance with ASTM Standard G57–78, or another standard approved by the Administrator, show that soil resistivity in an installation location is 12,000 ohm cm or more (unless a more stringent standard is prescribed by the Administrator by rule), a storage tank without corrosion protection may be installed in that location.

§ 280.12 Definitions
"Above ground release" means any release to the surface of the land or to surface water. This includes, but is not limited to, releases from the above ground portion of an underground storage tank system and releases associated with overfills and transfer operations during regulated substance deliveries to or dispensing from an UST system.
"Ancillary equipment" means any device including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps, that are used to distribute, meter, or control the flow of petroleum or hazardous substances from an underground storage tank.
"Below ground release" means any release to the subsurface of the land and to ground water. This includes, but is not limited to, releases from the below ground portions of an underground storage tank system and releases associated with overfills and transfer operations as the regulated substance is delivered to or dispensed from an underground storage tank.
"Beneath the surface of the ground" means beneath the ground surface or otherwise covered with materials so that physical inspection is precluded.
"Compatible" means the ability of two or more substances to maintain their respective physical and chemical properties upon contact with one another for extended periods of time and under varied environmental conditions (i.e., at different temperatures).
"Connected piping" means all underground piping including valves, elbows, joints, flanges, and flexible connectors attached to a tank system through which regulated substances flow. For the purpose of determining how much piping is connected to any individual UST system, the piping which joins the two UST systems should be allocated equally between them.
"Consumptive use" with respect to heating oil means burned on the premises.
"Corrosion expert" means a person who, by reason of his knowledge of the physical sciences and the principles of engineering and mathematics, acquired
by a professional education and related practical experience, is qualified to engage in the practice of corrosion control on buried or submerged metal piping systems and metal tanks. Such a person must be certified as being qualified by the National Association of Corrosion Engineers (NACE) or be a registered professional engineer who has certification or licensing that includes education and experience in corrosion control of buried or submerged metal piping systems and metal tanks.

"Electrical equipment" means underground equipment which contains dielectric fluid which is necessary for the operation of equipment such as transformers and buried electrical cable.

"Excavation area" is defined as the area containing the tank system and backfill created by the ground surface, wall of the pit and trench to which the UST system is placed at the time of installation.

"Existing tank system" means a tank system which is used to contain an accumulation of regulated substances or for which installation has commenced or prior to the effective date of this regulation. Installation will be considered to have commenced if the owner or operator has obtained all federal, state, and local approvals, or permits necessary to begin physical construction of the site or installation of the tank system, and if either (a) a continuous on-site physical construction or installation has begun, or (b) the owner or operator has entered into contractual obligations— which cannot be cancelled or modified without substantial loss— with respect to the tank system to be completed within a reasonable time.

"Farm tank" is a tank located on a tract of land devoted to the production of crops, or raising animals, including fish, and associated residences and improvements. To be exempt from UST jurisdiction, a farm tank must be located on the farm property. "Farm" includes fish hatcheries, rangeland and nurseries with growing operations.

"Flow-through process tank" is a tank that forms an integral part of an industrial or commercial process through which there is a steady or uninterrupted flow of materials during the operation of the process.

"Free product" refers to regulated substance in the non-aqueous phase (e.g., liquid not dissolved in water) that is beneath the surface of the ground.

"Gathering lines" means any pipeline, equipment, facility, or building used in the transportation of oil or gas during oil or gas production or gathering operations.

"Hazardous substance tank system" or "hazardous substance UST" means an underground storage tank system that contains an accumulation of hazardous substances defined in section 101(14) of CERCLA other than any substance regulated as a hazardous waste under Subtitle C of the Solid Waste Disposal Act (RCRA) or a mixture of such substances and petroleum in which hazardous substances comprise greater than 50% of the weight or volume of the mixture.

"Heating oil" refers to a type of fuel oil that is one of eight technical grades. These grades are: No. 1; No. 2; No. 4-light, No. 4-heavy; No. 5-light, No. 5-heavy; No. 6; and residual. Heating oil also refers to fuel oil substitutes such as kerosene or diesel when used for heating purposes.

"Hydraulic lift tank" means a tank holding hydraulic fluid for a closed-loop mechanical system that uses compressed air and hydraulic fluid to operate lifts, elevators, and other similar devices.

"Implementing agency" means EPA, or, in the case of a state with a program approved under section 9004, the designated state agency responsible for carrying out an approved UST program.

"Interstitial monitoring" is a leak detection method which entails the surveillance of the space between an UST system walls and the secondary containment system for a change in steady state conditions. In a double-walled tank, this change may be indicated by a loss of vacuum, a drop in pressure, a drop in the fluid level in a visible reservoir, or the detection of the regulated substance and/or water in the interstitial space. In a secondary containment system consisting of a liner (natural or synthetic) or a vault, the surveillance consists of frequent to continuous sampling from a monitoring well between the UST and the liner to detect the presence of regulated substance in the well(s).

"Inventory controls" are techniques used to identify a loss of product that are based on volumetric measurements in the tank and reconciliation of those measurements with product delivery and withdrawal records.

"Liquid trap" means sumps, well cells, and other traps used in association with oil and gas production, gathering, and extraction operations (including gas production plants), for the purpose of collecting oil, water, and other liquids. Such liquid traps may temporarily collect liquids for subsequent disposition or re-injection into a production or pipeline stream, or may collect and separate liquids from a gas stream.

"Motor fuel" is a petroleum-based fuel used in the operation of an engine that propels a vehicle for transportation of people or cargo.

"New tank system" means an UST system for which installation has commenced after the effective date of this regulation. Installation will be considered to have commenced if the owner or operator has obtained all federal, state and local approvals, or permits necessary to begin physical construction of the site or installation of the tank, and if either (a) a continuous on-site physical construction or installation program has begun, or (b) the owner or operator has entered into contractual obligations— which cannot be cancelled or modified without substantial loss— for physical construction at the site or installation of the tank system to be completed within a reasonable time:

"Non-commercial purposes" with respect to motor fuel means not for resale.

"On the premises where stored" with respect to heating oil means UST systems located on the same property where the stored heating oil is used.

"Operational life" is the period beginning from the time when the installation of the tank system is commenced until it is properly closed under § 280.80.

"Operator" means any person in control of, or having responsibility for, the daily operation of the UST system.

"Overfill release" is a release that occurs when a tank is filled beyond its capacity, resulting in a discharge of the regulated substance to the environment.

"Owner" means: (a) in the case of an UST system in use on the date of enactment of the Hazardous and Solid Waste Amendments of 1984, or brought into use after that date, any person who owns an UST system used for storage, use, or dispensing of regulated substances; and (b) in the case of any UST system in use before the date of enactment of the Hazardous and Solid Waste Amendments of 1984, but no longer in use on the date of enactment of such Amendments, any person who owned such UST immediately before the discontinuation of its use.

"Person" means an individual, trust, firm, joint stock company, federal agency, corporation, state, municipality, commission, political subdivision of a state, or any interstate body. "Person" also includes a consortium, a joint venture, a commercial entity, and the United States Government.
"Petroleum" means crude oil, crude oil fractions, and refined petroleum fractions, including gasoline, kerosene, heating oils, and diesel fuels.

"Petroleum tank system" or "Petroleum UST" means an UST system that contains an accumulation of petroleum or a mixture of regulated substances and petroleum in which petroleum comprises greater than 50% of the weight or volume of the mixture.

"Pipeline facilities (including gathering lines)" are new and existing pipe rights-of-way and any equipment, facilities, or buildings regulated under (a) the Natural Gas Pipeline Safety Act of 1968 (49 U.S.C. App. 1671, et seq.); (b) the Hazardous Liquid Pipeline Safety Act of 1979 (49 U.S.C. App. 2001, et seq.); or (c) which is an intrastate pipeline facility regulated under State laws comparable to the provisions of law referred to in (a) or (b) of this definition.

"Positive sampling, test, or monitoring results" refer to the results of sampling, testing, or monitoring using a method described in Subpart D that indicate a release from an UST system has occurred.

"Regulated substance" means: (a) any substance defined in Section 101(14) of CERCLA (but not including any substance regulated as a hazardous waste under Subtitle C); and (b) petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute).

"Release" means any spilling, leaking, emitting, discharging, escaping, leaching or disposing from an underground storage tank into groundwater, surface water or subsurface soils.

"Release detection" means determining whether a release of a regulated substance has occurred from the UST system into the environment or into the interstitial area between the UST system and a secondary barrier around it.

"Residential tank" is a tank located on property used primarily for dwelling purposes.

"Secondary containment" is a system installed around an UST that is designed to prevent a release from migrating beyond the secondary containment system outer wall (in the case of a double-walled tank system) or excavation area (in the case of a liner or vault system) before the release can be detected. Such a system may include, but is not limited to, impervious liners (both natural and synthetic), double-walls or vaults.

"Septic tank" is a water-tight covered receptacle designed to receive or process, through liquid separation or biological digestion, the sewage discharged from a building sewer. The effluent from such receptacle is distributed for disposal through the soil and settled solids and scum from the tank are pumped out periodically and hauled to a treatment facility.

"Stormwater or wastewater collection system" means piping, pumps, conduits, and any other equipment necessary to collect and transport the flow of surface water run-off resulting from precipitation or domestic commercial, or industrial wastewater to and from retention areas or any areas where treatment is designated to occur.

"Sump" means any pit or reservoir that meets the definition of tank, including troughs or trenches connected to it that serves to temporarily collect regulated substances.

"Surface impoundment" is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials) that is designed to hold an accumulation of regulated substances and that is not an injection well.

"Tank" is a stationary device designed to contain an accumulation of regulated substances which is constructed of non-earthen materials (e.g., concrete, steel, plastic) that provide structural support.

"Tightness testing" means a procedure for testing the ability of a tank system to prevent an inadvertent release of any stored substance into the environment (or, in the case of an UST system, intrusion of ground water into a tank system).

"Underground area" means an underground room, such as a basement, cellar, shaft or vault, providing enough space for physical inspection of the exterior of the tank situated on or above the surface of the floor.

"Underground release" means any below-ground release.

"UST system" or "Tank System" means an underground storage tank and its associated ancillary equipment and containment system, if any.

"Underground storage tank" or "UST" means any one or combination of tanks (including underground pipes connected thereto) that is used to contain an accumulation of regulated substances, and the volume of which (including the volume of underground pipes connected thereto) is 10 percent or more beneath the surface of the ground. Such term does not include any:

(a) Farm or residential tank of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes;

(b) Tank used for storing heating oil for consumptive use on the premises where stored;

(c) Septic tank;

(d) Pipeline facility (including gathering lines) regulated under:

(1) The Natural Gas Pipeline Safety Act of 1968 (49 U.S.C. App. 1671, et seq.), or


(3) Which is an intrastate pipeline facility regulated under state laws comparable to the provisions of law referred to in paragraph (d)(1) of (d)(2) of this definition;

(e) Surface impoundment, pit, pond, or lagoon;

(f) Storm water or waste water collection system;

(g) Flow-through process tank;

(h) Liquid trap or associated gathering lines directly related to oil or gas production and gathering operations; or

(i) Storage tank situated in an underground area (such as a basement, cellar, mineworking, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.

The term "underground storage tank" or "UST" shall not include any pipes connected to any tank which is described in paragraphs (a) through (i) of this definition.

"Unsaturated zone" is the subsurface zone containing water under pressure less than that of the atmosphere, including water held by capillary forces within the soil and containing air or gases generally under atmospheric pressure. This zone is limited above by the ground surface and below by the upper surface of the zone of saturation (i.e., the water table).

"Wastewater treatment tank" means a tank that is part of a wastewater treatment facility regulated under either Section 402 or 307(b) of the Clean Water Act, and which receives and treats or stores an influent wastewater which contains regulated substances.

SUBPART B—NEW UST SYSTEMS: DESIGN, CONSTRUCTION, INSTALLATION AND NOTIFICATION

§ 280.20 Performance standards for new UST systems.

In order to prevent releases due to structural failure or corrosion for as long as the UST system is used to store regulated substances, all owners and operators of new UST systems must meet the following requirements:

(a) Tanks: Each tank must be properly designed, constructed and protected from corrosion in accordance with a
code of practice developed by a nationally recognized association or independent testing laboratory as specified below:

(1) The tank is constructed of fiberglass reinforced plastic.


(2) The tank is constructed of coated steel and cathodically protected in the following manner:

(i) The tank is coated and cathodically protected with factory-installed sacrificial anodes, and the cathodic protection system is operated and maintained by an independent corrosion expert in accordance with § 280.31(b)(2).

[Note: The following codes and standards may be used as guidance for complying with paragraph (a)(2)(i) of this section:

(A) Steel Tank Institute "Specification for s.p-3 System of External Corrosion Protection of Underground Steel Storage Tanks";

(B) Underwriters Laboratories Standard 1745, "Corrosion Protection Systems for Underground Storage Tanks";


(ii) The tank is coated and cathodically protected with a field-installed cathodic protection system and the cathodic protection system is designed by an independent corrosion expert and operated and maintained in accordance with § 280.31(b) (1) and (c).

[Note: The following codes and standards may be used as guidance for complying with paragraph (a)(2)(ii) of this section:


(B) National Association of Corrosion Engineers (NACE) Standard RP-02-85, "Control of External Corrosion on Metallic Buried, Partially Buried, or Submerged Liquid Storage Systems" and Underwriters Laboratories of Canada "Standard for Steel Underground Tanks for Flammable and Combustible Liquids.";]

(3) The tank is constructed of a steel-fiberglass-reinforced-plastic composite.

[Note: The UL Standard 1746, "Corrosion Protection Systems for Underground Storage Tanks" may be used as guidance for complying with paragraph (a)(3) of this section.]

(4) The tank design, construction and corrosion protection is determined by the implementing agency to prevent the release of any stored regulated substance in a manner that is no less protective of human health and the environment than paragraphs (a)(1) through (3) of this section.

(b) Piping. The underground piping must be properly designed, constructed and protected from corrosion in accordance with a code of practice developed by a nationally recognized association or independent testing laboratory as specified below:

(1) The piping is constructed of fiberglass reinforced plastic.

[Note: The following codes and standards may be used as guidance for complying with paragraph (b)(1) of this section:

(i) Underwriters Laboratories (UL) Subject 971, "UL Listed Non-Metal Pipe" and UL Standard 567, "Pipe Connectors for Flammable and Combustible Liquids," or


(ii) The piping is coated steel and cathodically protected with a field-installed cathodic protection system that is designed by an independent corrosion expert and operated and maintained in accordance with § 280.31(b) (1) and (c); or

[Note: The following codes and standards may be used as guidance for complying with paragraph (b)(2) of this section:


(5) The piping layout must be designed to minimize crossed lines and interference with conduit and other tank system components. If crossing of lines is unavoidable, adequate clearance must be provided to prevent contact.

(6) The pipe joints must be cut accurately and deburred to provide liquid-tight seals.

(7) Swing joints or flexible connectors must be installed at the beginning and end of each line as well as where lines change direction.

(8) Installation of tank and piping cathodic protection must be in accordance with manufacturer's instructions, plans and specifications.

(9) Tank and piping tightness tests must be performed after backfill is installed and before the system is placed in operation. This test must be performed in accordance with § 280.41(c)(1).

Note.—Tank and piping system installation practices and procedures described in the following codes may be used as guidance for meeting the requirements of paragraph (c) of this section:

(i) American Petroleum Institute (API) Publication 1815, "Installation of Underground Petroleum Storage System"; or

(ii) Petroleum Equipment Institute (PEI) Publication RP100, "Recommended Practices for Installation of Underground Liquid Storage Systems"; or


(d) All owners and operators must submit information demonstrating compliance with paragraph (c) of this section and provide a certification of compliance on the UST notification form in accordance with § 280.22.
§ 280.21 Upgrading of existing UST systems.

(a) No later than (insert date 10 years after the effective date of the final regulations), all existing UST systems must:

(1) Comply with the requirements for new UST systems under § 280.20;

(2) Have a field installed cathodic protection system that is designed by an independent corrosion expert and operated and maintained in accordance with § 280.31; or

(3) Permanently close in accordance with § 280.80.

§ 280.22 Notification requirements.

(a) On or before May 8, 1986, each owner of an underground storage tank currently in use must submit, in the form prescribed in Appendix I of this section, a notice of the existence of such tank to the State or local agency or department designated in Appendix II of this section to receive such notice.

(b) On or before May 8, 1986, each owner of an underground storage tank taken out of operation after January 1, 1974 (unless the owner knows that such tank has been removed from the ground) must submit, in the form prescribed in Appendix I of this section, a notice of the existence of such tank to the State or local agency or department designated in Appendix II of this section to receive such notice.

(c) Any owner who brings an underground storage tank into use after May 8, 1986, must within 30 days of bringing such tank into use, submit, in the form prescribed in Appendix I of this section, a notice of the existence of such tank to the State or local agency or department designated in Appendix II of this section to receive such notice.

(d) In States where State law, regulations, or procedures require owners to use forms that differ from those set forth in Appendix I of this section to fulfill the requirements of this section, the State forms may be submitted in lieu of the forms set forth in Appendix I of this section. If a State requires that its form be used in lieu of the form presented in this regulation, such form must meet the requirements of Section 9002.

(e) Owners required to submit notices under paragraphs (a) through (c) of this section must provide notices to the appropriate agencies or departments identified in Appendix II of this section for each tank they own. Owners may provide notice for several tanks using one notification form, but owners who own tanks located at more than one place of operation must file a separate notification form for each separate place of operation.

(f) Notices required to be submitted under paragraphs (a) through (c) of this section must provide all of the information indicated on the prescribed form (or appropriate State form) for each tank for which notice must be given.

(g) Beginning on December 9, 1985 through May 9, 1987 any person who deposits regulated substances in an underground storage tank must make reasonable efforts to notify the owner or operator of such tank of the owner’s obligations under paragraphs (a) through (c) of this section.

(h) Beginning 30 days after the Administrator issues new tank performance standards pursuant to RCRA section 9003(e), any person who sells a tank intended to be used as an underground storage tank must notify the purchaser of such tank of the owner’s notification obligations under paragraphs (a) through (c) of this section.

(i) Paragraphs (a) through (c) of this section do not apply to tanks for which notice was given pursuant to section 103(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980.

(j) All owners and operators of new UST systems must certify in the notification form that the methods used comply with the following requirements:

(1) Installation of tanks and piping under § 280.20(c);

(2) Cathodic protection of steel tanks and piping under § 280.20(a) and (b);

(3) Financial responsibility under Subpart I; and

(4) Release detection under §§ 280.41 and 280.42.

(k) All owners and operators of new UST systems must assure that the installer certifies in the notification form that the methods used to install the tanks and piping complies with the requirements in § 280.20(c).
# APPENDIX I to §280.22
## Notification for Underground Storage Tanks

<table>
<thead>
<tr>
<th>I.D. Number</th>
<th>STATE USE ONLY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Date Received</td>
</tr>
</tbody>
</table>

### GENERAL INFORMATION

Notification is required by Federal law for all underground tanks that have been used to store regulated substances since January 1, 1974, that are in the ground as of May 8, 1986, or that are brought into use after May 8, 1986. The information required is by Section 9002 of the Resource Conservation and Recovery Act (RCRA), as amended.

The primary purpose of this notification program is to locate and evaluate underground tanks that store or have stored petroleum or hazardous substances. It is expected that the information you provide will be based on reasonably available records, or, in the absence of such records, your knowledge, belief, or recollection.

**Who Must Notify?** Section 9002 of RCRA, as amended, requires that, unless exempted, owners of underground tanks that store regulated substances must notify designated State or local agencies of the existence of their tanks. Owners mean:

1. In the case of an underground storage tank in use on November 8, 1984, or brought into use after that date, any person who owns an underground storage tank used for the storage, use, or dispensing of regulated substances.
2. In the case of any underground storage tank in use before November 8, 1984, but no longer in use on that date, any person who owned such tank immediately before the discontinuation of its use.

**What Tanks Are Included?** Underground storage tanks are defined as any one or combination of tanks that (1) is used to contain an accumulation of regulated substances, and (2) whose volume (including connected underground piping) is 10% or more beneath the ground. Some examples are underground tanks storing:

- 1. gasoline, used oil, or diesel fuel, and 2. industrial solvents, pesticides, herbicides or fertilizers.

**What Tanks Are Excluded?** Tanks removed from the ground are not subject to notification. Other tanks excluded from notification are:

- 1. farm or residential tanks of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes.
- 2. tanks used for storing heating oil for consumptive use on the premises where stored.
- 3. septic tanks.
- 4. pipeline facilities (including gathering lines) regulated under the Natural Gas Pipeline Safety Act of 1968, or the Hazardous Liquid Pipeline Safety Act of 1979, or which are an interstate pipeline facility regulated under State law.
- 5. surface impoundments, pits, ponds, or lagoons.
- 6. storm water or waste water collection systems.
- 7. flow-through process tanks.
- 8. liquid traps or associated gathering lines directly related to oil and gas production and gathering operations.
- 9. storage tanks situated in an underground area (such as a basement, cellar, manhole, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.

**What Substances Are Covered?** The notification requirements apply to underground storage tanks that contain regulated substances. This includes any substance defined as hazardous in section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), with the exception of those substances regulated as hazardous waste under Subtitle C of RCRA. It also includes petroleum, e.g., crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute).

**Where To Notify?** Completed notification forms should be sent to the address given at the top of this page.

**When To Notify?** 1. Owners of underground storage tanks in use or that have been taken out of operation after January 1, 1974, but still in the ground, must notify by May 8, 1986. 2. Owners who bring underground storage tanks into use after May 8, 1986, must notify within 30 days of bringing the tanks into use.

**Penalties:** Any owner who knowingly fails to notify or submits false information shall be subject to a civil penalty not to exceed $10,000 for each tank for which notification is not given or for which false information is submitted.

### INSTRUCTIONS

Please type or print in ink all items except “signature” in Section V. This form must be completed for each location containing underground storage tanks. If more than 5 tanks are owned at this location, photocopy the reverse side, and staple continuation sheets to this form.

#### I. OWNERSHIP OF TANK(S)

<table>
<thead>
<tr>
<th>Owner Name (Corporation, Individual, Public Agency, or Other Entity)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Street Address</td>
</tr>
<tr>
<td>County</td>
</tr>
<tr>
<td>City (nearest) State ZIP Code</td>
</tr>
<tr>
<td>Area Code Phone Number</td>
</tr>
</tbody>
</table>

#### II. LOCATION OF TANK(S)

<table>
<thead>
<tr>
<th>Facility Name or Company Site Identifier, as applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Street Address or State Road, as applicable</td>
</tr>
<tr>
<td>County</td>
</tr>
<tr>
<td>City (nearest) State ZIP Code</td>
</tr>
</tbody>
</table>

#### III. CONTACT PERSON AT TANK LOCATION

<table>
<thead>
<tr>
<th>Name (same as Section I, mark box here)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job Title</td>
</tr>
<tr>
<td>Area Code Phone Number</td>
</tr>
</tbody>
</table>

#### IV. TYPE OF NOTIFICATION

Mark box here only if this is an amended or subsequent notification for this location.

#### V. CERTIFICATION (Read and sign after completing Section VI)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Name and official title of owner or owner’s authorized representative Signature Date Signed

CONTINUE ON REVERSE SIDE
VI. DESCRIPTION OF UNDERGROUND STORAGE TANKS (Complete for each tank at this location):  

<table>
<thead>
<tr>
<th>Tank Identification No. (e.g., ABC-123), or Arbitrarily Assigned Sequential Number (e.g., 1,2,3...)</th>
<th>Tank No.</th>
<th>Tank No.</th>
<th>Tank No.</th>
<th>Tank No.</th>
<th>Tank No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Status of Tank (Mark all that apply)</td>
<td>Currently in Use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Temporarily Out of Use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Permanently Out of Use</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Brought into Use after 5/8/86</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Estimated Age (Years)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Estimated Total Capacity (Gallons)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Material of Construction (Mark one)</td>
<td>Steel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Concrete</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fiberglass Reinforced Plastic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unknown</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other, Please Specify</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Internal Protection (Mark all that apply)</td>
<td>Cathodic Protection</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interior Lining (e.g., epoxy resins)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unknown</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other, Please Specify</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. External Protection (Mark all that apply)</td>
<td>Cathodic Protection</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Painted (e.g., asphallic)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fiberglass Reinforced Plastic Coated</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>None</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unknown</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other, Please Specify</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Piping (Mark all that apply)</td>
<td>Bare Steel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Galvanized Steel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fiberglass Reinforced Plastic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cathodically Protected</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unknown</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other, Please Specify</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Substance Currently or Last Stored in Greatest Quantity by Volume (Mark all that apply)</td>
<td>a. Empty</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Petroleum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Diesel</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kerosene</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gasoline (including alcohol blends)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Used Oil</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other, Please Specify</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Hazardous Substance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Please Indicate Name of Principal CERCLA Substance or Chemical Abstract Service (CAS) No.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mark box if tank stores a mixture of substances</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Unknown</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Additional Information (for tanks permanently taken out of service)</td>
<td>a. Estimated date last used (mo/yr)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Estimated quantity of substance remaining (gal.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>c. Mark box if tank was filled with inert material (e.g., sand, concrete)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### VII. Certification of Compliance (Complete for Each Location)

<table>
<thead>
<tr>
<th>Tank Identification No. (e.g., ABC-123)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tank No.</td>
</tr>
<tr>
<td>----------</td>
</tr>
</tbody>
</table>

#### 10. Installation (mark all that apply):
- The tank and piping installer was certified by the tank and piping manufacturers.
- The installer showed proof of certification by state or local regulatory agencies.
- The installation was inspected by a registered professional engineer.
- The installation was inspected by state or local agencies.
- Manufacture-supplied checklists of installation procedures were completed.
- The tank and piping were tested for leaks during and after installation.

#### 7. Other Specify:
- Release Detection (mark all that apply):
  1. Soil vapor monitoring.
  2. Groundwater monitoring.
  3. Monitoring above an impermeable barrier.
  4. Automatic in-tank monitoring and inventory control.
  5. Secondary containment with interstitial monitoring.
  7. Another method approved by the implementing agency. Specify:

#### 12. Corrosion Protection (If applicable):
- As specified for factory-installed cathodic protection for steel tanks.
- As specified for field-installed cathodic protection for steel tanks.
- Another method approved by the implementing agency. Specify:

#### 13. I have financial responsibility in accordance with Subpart I.
- Method:
- Insurer:
- Policy #:

#### 14. On the I certify that the information concerning installation provided in item 10 is true, to the best of my belief and knowledge.
- Installer:
- NAME
- POSITION
- COMPANY

---

### Appendix II to § 280.22—List of Agencies

#### Alabama (EPA Form)
- Alabama Department of Environmental Mgmt.
  - Ground Water Section/Water Division
  - Montgomery, Alabama 36130

#### Alaska (EPA Form)
- Department of Environmental Conservation
  - Puesto O
  - Juneau, Alaska 99811
  - 907/465-2853

#### American Samoa (EPA Form)
- Executive Secretary
  - Environmental Quality Commission
  - Ofice of the Governor
  - American Samoa Government
  - Pago Pago, American Samoa 96799

#### Arizona (EPA Form)
- Attention: UST Notification

#### Arkansas (EPA Form)
- Attention: UST Coordinator
  - Arkansas Department of Health Services
  - Environmental Health Services
  - 2005 N. Central
  - Phoenix, Arizona 85004

#### California (State Form)
- Ed Anton
  - California Water Resources Control Board

#### Colorado (EPA Form)
- Kenneth Mesch, Section Chief
  - Colorado Department of Health
  - Waste Management Division
  - Groundwater Tank Program
  - Denver, Colorado 80220
  - 303/328-8333 Ext. 4364

#### Connecticut (State Form)
- Hazardous Materials Management Unit
  - Department of Environmental Protection
  - State Office Building
  - 165 Capitol Avenue
  - Hartford, Connecticut 06106

#### Delaware (State Form)
- Division of Air and Waste Management
  - Department of Natural Resources and Environmental Control
  - P.O. Box 1401
  - 80 Kings Highway
  - Dover, Delaware 19903
  - 302/730-5409

#### District of Columbia (EPA Form)
- Attention: UST Notification Form
  - Department of Consumer and Regulatory Affairs
  - Pesticides and Hazardous Waste Management Branch
  - Room 114
  - 5010 Overlook Avenue, S.W.
  - Washington, D.C. 20032

#### Florida (State Form)
- Florida Department of Environmental Regulation
  - Solid Waste Section
  - Twin Towers Office Building
  - 2600 Blair Stone Road
  - Tallahassee, Florida 32301
  - 904/487-4396

#### Georgia (EPA Form)
- Georgia Department of Natural Resources
  - Environmental Protection Division
  - Underground Storage Tank Program
  - 3420 Normal Berry Drive
  - Hapeville, Georgia 30354

#### Guam (State Form)
- James B. Branch, Administrator
  - Guam Environmental Protection Agency
  - P.O. Box 2999
  - Agana, Guam 96910

#### Hawaii (EPA Form)
- Chief, Noise and Radiation Branch
  - Hawaii Department of Health
  - 991 Ala Moana Boulevard Honolulu, Hawaii 96814
  - 808/548-4129

#### Idaho (EPA Form)
- Underground Storage Tank Coordinator
  - Water Quality Bureau
  - Idaho Department of Health & Welfare
  - Division of Environment
  - 450 W. State Street
  - Boise, Idaho 83720
  - 208/334-4251
certain underground storage tanks to notify designated State or local agencies by May 8, 1986 of the existence of their tanks. Notifications for tanks brought into use after May 8, 1986 must be made within 30 days. Consult EPA’s regulations, issued on ———, 1985, to determine if you are affected by this law.

One-Time Notification Letter
Dear Customer: A new Federal law directs the Environmental Protection Agency (EPA) to develop a comprehensive regulatory program for underground storage tanks. As part of the new law, owners of certain underground tanks used to store petroleum or hazardous substances must notify designated State or local agencies of the existence of their tanks by May 8, 1986. This includes owners of tanks currently stored to contain such substances and owners of tanks taken out of operation after January 1, 1974, but still in the ground. Owners who bring tanks into use after May 8, 1986, must notify within 30 days.

The purpose of the notification program is to assist EPA and the States in locating and evaluating underground storage tanks. Enclosed is a copy of EPA’s regulations concerning owners of underground storage tanks, and a notification form.

Please review the regulations to determine if you are affected by the notification requirements. A list of the addresses of the State or local agencies designated to receive the notification is contained in the discussion of the regulations.

Subpart C—General Operating Requirements
§ 280.30 Spill and overfill control.
(a) All owners and operators must ensure that releases due to spills or overfills do not occur. The owner and operator must ensure that the volume of product in the tank is greater than the volume of product to be transferred to the tank before the transfer is made and that a person is physically present at all times during transfer to observe the transfer.

Note.—The transfer procedures described in NFPA 385 may be used as guidelines for compliance with paragraph (a) of this section. API publication 2121, “Recommended Practice for Bulk Liquid Storage Control at Retail Outlets” and NFPA 30 provide further guidance on the matter of spill and overfill control.

(b) All new UST systems, as well as all existing UST systems using a method of external release detection specified under § 280.41(d) through (f) or (i), must use one or more of the following spill or overfill prevention devices:

(1) A sensor for measuring the level of product in the tank, equipped with an audible or visual alarm that is triggered when the tank is 95% full;

(2) A device designed to cause flow into the tank to shut off automatically when the tank is 95% full;

(3) A spill catchment basin around the fill pipe large enough to contain the volume of the hose;

(4) An equivalent device designed to prevent releases due to spills and overfills that has been approved by the implementing agency.

(c) All owners and operators of existing UST systems must use one or more of the spill or overfill prevention devices specified in paragraph (b) for each tank no later than (insert date 10 years from the effective date of the final regulations).

§ 280.31 Operation and maintenance of corrosion protection.
All owners and operators of steel UST systems with corrosion protection must comply with the following requirements to assure that releases due to corrosion are prevented for as long as the UST system is used to store regulated substances:

(a) All corrosion protection systems must be operated and maintained to continuously provide corrosion protection to the metal components of the UST system.

(b) All UST systems equipped with cathodic protection systems must be inspected by an independent corrosion expert in accordance with the following minimum inspection schedule:

(1) The proper operation of field installed cathodic protection systems must be tested within six months of installation and at least annually thereafter;

(2) The proper operation of factory installed cathodic protection systems must be tested within six months of installation and at least every five years thereafter; or

(3) All sources of impressed current must be inspected and/or tested, as appropriate, at least annually.

(c) All UST systems with impressed current cathodic protection systems must also be inspected every sixty days to ensure the equipment is running properly.

(d) For all UST systems using corrosion protection measures, records must be maintained (in accordance with § 280.34) of the operation of these systems capable of demonstrating compliance with the performance standards in this section. These records must provide the following:

(1) The results of the last three inspections required on a bi-monthly basis;

(2) The results of testing from the last two service checks required annually; and
(3) The results of the last service check if required less frequently than an annual basis.

(e) One or more of the following criteria must be used in performing such tests as required in the paragraph (b) of this section to determine that cathodic protection is adequate:

(1) A negative (cathodic) potential of at least 0.65 volts as measured between the structure and a saturated copper-copper-sulfate (Cu-Cu-SO₄) reference electrode contacting the soil; or

(2) A negative (cathodic) potential shift of at least 300 mv as measured between the structure and a Cu-Cu-SO₄ reference electrode contacting the soil. This shift is the difference between the unprotected potential and the potential with the protective current applied; or

(3) A negative (cathodic) polarization potential shift of at least 100 mv as measured between the structure and a Cu-Cu-SO₄ reference electrode contacting the soil. This shift is the polarization decay which is determined immediately after the protective current is interrupted.

(f) All UST system owners and operators of new underground tanks and connected piping must certify compliance with corrosion protection requirements on the notification form submitted pursuant to § 280.22.

§ 280.32 Compatibility.
 Owners and operators must use an UST system made of or lined with materials that are compatible with the substance stored in such system.

§ 280.33 Repairs allowed.
.. (a) A tank may be repaired and relined if the owner and operator receives a certification in writing either by the person performing the repairs or an independent registered professional engineer, that:

(1) The vacuum test required in paragraph (d) of this section was conducted; and was held with no adverse impacts on the relined material as determined by an internal inspection.

(2) The lining material is compatible with the regulated substance stored;

(3) The tank was inspected internally and ultrasonically tested and determined to be structurally sound; and

(4) The tank has not been repaired or relined previously.

Note—The lining/repair procedures described in API 1631 may be used as guidelines for compliance with paragraph (a) of this section;

(b) All steel tanks with corrosion holes that are subsequently repaired must be retrofitted with a cathodic protection system that is designed by an independent corrosion expert and operated and maintained in accordance with § 280.31.

(c) Repairs to fiberglass reinforced plastic tanks may be made only by the manufacturer's authorized representatives.

(d) A vacuum test (at 5.3 in. Hg) must be performed on the tank by the tank repairer after the repair/relining is completed and before the UST system is put back into service.

(e) The owner and operator may not repair holes in piping and fittings, must replace any piece of such piping or fittings from which a release has occurred. Replacement piping and fittings must meet the requirements of § 280.20(b) and (c), and § 280.32. Loose fittings and joints in piping that have been tightened to eliminate leakage may be put back into service.

(f) The owner and operator must have a tank tightness test (in accordance with § 280.41(c)(1)) performed within one year of the repair of all UST systems that are without interstitial monitoring or other release detection that is sampled at least every 30 days.

(g) All UST system owners and operators with a repaired tank must maintain records capable of demonstrating compliance with requirements of this section for the remaining operating life of the UST system. A signed certification in accordance with paragraph (a) of this section and a record of the results of all performance tests required under this section would satisfy this requirement.

§ 280.34 Maintenance and availability of records.
All UST system owners and operators shall cooperate fully with inspections, monitoring, and testing conducted by the implementing agency, as well as requests for document submission, testing, and monitoring by the owner or operator pursuant to section 9005 of Subtitle I of the Resource Conservation and Recovery Act, as amended. All records required in this part must be maintained:

(a) On-site and be immediately available for inspection; or

(b) At a readily available alternative site and be provided for inspection within 24 hours to the implementing agency.

Subpart D—Release Detection
§ 280.40 General requirements for all UST systems.

(a) Subject to paragraph (b) of this section, all owners and operators of new and existing UST systems must provide a method, or combination of methods, of release detection that is: .(1) Capable of detecting a release from any portion of the UST system;

(2) Installed, calibrated, operated, and maintained in accordance with the manufacturer's instructions, including routine maintenance and service checks for operability or running condition;

(3) Capable of meeting the performance requirements for that method in § 280.41, with any performance claims and their manner of determination described in writing by the equipment manufacturer or installer;

(4) Sampled, tested, or checked for releases at a minimum frequency of at least once every 30 days, except as provided for tank testing in § 280.41(c)(1).

(b) If a method is planned for detecting releases outside of the tank, the owner or operator must perform a site assessment prior to installation of the detection system to assure compliance with the requirements in § 280.41 (d) through (f) or (i).

(c) All existing UST systems must comply with the release detection requirements of paragraphs (a) and (b) of this section and § 280.41 according to the following schedule:

(1) For any existing UST system that is not protected from corrosion and not constructed of non-corrodible materials: no later than (insert date three years after the effective date of the final regulations).

(2) For any existing UST system that is protected from corrosion or constructed of non-corrodible materials: no later than (insert date five years after the effective date of final regulations).

(3) Any existing UST system that cannot apply a method of release detection that complies with paragraphs (a) and (b) of this section and § 280.41 must permanently close in accordance with § 280.80 within (insert date 3 years after the effective date of the final regulations) if the UST system is not protected from corrosion or not constructed of non-corrodible materials, or within (insert date 5 years after the effective date of the regulation) if the UST system is protected from corrosion or constructed of non-corrodible materials.

§ 280.41 Requirements for new UST systems.

(a) Except as provided in paragraph (b) of this section, each owner and operator of a new UST system must use one of the following release detection methods specified in paragraphs (c) through (i) of this section in accordance with the requirements listed for each method, and must specify the method of release detection to be used on a
(a) Each owner and operator of a new or existing hazardous substance UST system must use the method specified in paragraph (h) of this section unless the owner or operator has demonstrated compliance with another method specified in this section, along with the requirements of § 280.40, and has received approval from the implementing agency.

(b) Each owner and operator of a new hazardous substance UST system must use the method specified in paragraph (h) of this section unless the owner or operator has demonstrated compliance with another method specified in this section, along with the requirements of § 280.40, and has received approval from the implementing agency.

(1) The implementing agency must be notified in writing by the owner and operator of the intention to conduct and submit a demonstration for a variance.

(2) The notification of the implementing agency in paragraph (a)(1) of this section must:

(i) Describe the steps for conducting the demonstration and the time table for completing them; and

(ii) Address how each of the general requirements in § 280.40(a), as well as the requirements in § 280.41 (c) through (g) for the release detection method that is selected (or being compared to), will be met at the site.

(c) A combination of tank system tightness testing and product inventory reconciliation (or another test of equivalent performance) may be used, but only if:

(1) Except as provided under paragraph (c)(3) of this section, the tightness test method(s) is conducted semi-annually and is capable of detecting a 0.1 gallon per hour leak rate with a probability of detection of 0.99 and a probability of false alarm of 0.01 from any portion of the UST system; and

(2) Inventory reconciliation (or another test of equivalent performance) is conducted weekly to detect a release of at least 5 percent of flow-through on a weekly basis, and monthly to detect a release of at least 0.5 percent of flow-through on a monthly basis in the following manner:

(i) Inventory volume measurements for regulated substance inputs, withdrawals, and the amount still remaining in the tank are recorded each operating day;

(ii) The equipment used is capable of measuring the level of product over the full range of the tank’s height to the nearest 1⁄8 of an inch;

(iii) The regulated substance inputs are reconciled with delivery receipts by measurement of the tank inventory volume prior to and after delivery;

(iv) Deliveries are made through a drop tube that extends to within one foot of the tank bottom;

(v) Product dispensing is metered and recorded within an accuracy of 5 cubic inches for every 5 gallons of product withdrawn; and

(vi) The measurement of any water level in the bottom of the tank is made to the nearest 1⁄8 of an inch at least once a month when any portion of the tank is located within the water table.

Note.—Practices described in the American Petroleum Institute (API) Publication 1621, “Recommended Practice for Bulk Liquid Stock Control at Retail Outlets,” may be used, where applicable as guidelines in meeting the requirement of paragraph (c)(2) of this section.

(3) At existing tank systems, prior to (insert date 10 years after the effective date of the final regulations), the tightness test must be conducted no less often than every five years for steel UST systems protected from corrosion or constructed of non-corrodeable materials, and no less often than every three years for all other UST systems.

(d) Testing or monitoring for vapors within the soil gas of the excavation area may be used, but only if:

(1) The materials used as backfill are sufficiently porous (e.g., gravel, sand, crushed rock) to readily allow diffusion of vapors from releases into the excavation area;

(2) The stored regulated substance is sufficiently volatile (e.g., gasoline) to result in a vapor level that is detectable by the monitoring devices located in the excavation area in the event of a release from the UST system;

(3) The measurement of vapors by the monitoring device is not rendered inoperable by the ground water, rainfall, or soil moisture so that a release could go undetected for more than 30 days;

(4) The level of background contamination in the excavation area will not interfere with detection of releases from the UST system and, when measured in the soil gas, is no greater than 500 ppm of total hydrocarbons;

(5) The vapor monitors are designed and operated to allow the threshold level to be preset specifically for the type of regulated substance stored in the tank system and are capable of detecting any significant increase in concentration of total hydrocarbons above background levels;

(6) In the UST excavation area, the site is assessed to ensure that the number and positioning of the monitoring wells or devices in the excavation area will detect releases from any portion of the UST system;

(7) Monitoring is conducted to detect the presence of at least 0.01 cm/sec (e.g., the soil should consist of gravels, coarse to medium sands, course silts or other permeable materials);

(8) The barrier is designed to intercept any release from the UST system and ensure its detection by the monitoring well or device;

(9) The barrier is compatible with the regulated substance stored so that a release from the UST system will not cause deterioration of the barrier;

(10) The ground water, soil moisture, or rainfall will not render the testing or sampling method that is used inoperable so that a release could go undetected for more than 30 days;

(11) The site is assessed to ensure that the equipment is capable of distinguishing between releases that are intended for use under such conditions; and

(12) Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.

(e) Testing or monitoring for liquids using at least one monitoring well or device in the unsaturated zone between the UST system and an impermeable barrier immediately below it may be used, but only if:

(1) The barrier underground the UST system consists of either native soils or artificially-constructed materials that is sufficiently thick and impermeable (at least 10-6 cm/sec) to permit interception and detection of a release from the UST system;

(2) The barrier is designed to intercept any release from the UST system and ensure its detection by the monitoring well or device;

(3) The barrier is compatible with the regulated substance stored so that a release from the UST system will not cause deterioration of the barrier;

(4) The ground water, soil moisture, or rainfall will not render the testing or sampling method that is used inoperable so that a release could go undetected for more than 30 days;

(5) The site is assessed to ensure that the equipment is capable of distinguishing between releases that are intended for use under such conditions; and

(6) Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.

(f) Equipment for automatic in-tank monitoring that tests for the loss of product and conducts automatic notification form in accordance with § 280.22 within 30 days of bringing the tank into use.

(g) The reqtruements in § 280.41 (c) through (g) for the release detection method that is selected (or is being compared to), the demonstration and the time table for completing them; and

(h) Notified in writing the implementing agency.
inventory reconciliation may be used, but only if:

1. The automatic product level monitor test is conducted at a minimum frequency of at least once every 30 days when the tank is at least eighty percent full, and is capable of detecting 0.2 gallon per hour leak rate with a probability of detection of 0.99 and a probability of false alarm of 0.01; and
2. Automatic inventory reconciliation (or another test of equivalent performance) is conducted in accordance with the requirements of §280.45(c)(2).

(b) Interstitial monitoring between the UST system and a secondary barrier immediately around it may be used, but only if:

1. The secondary barrier is designed, constructed and installed to ensure detection of any release from the UST system so that corrective action can be taken in accordance with Subpart F and G.

Note—The provisions outlined in the Steel Tank Institute’s (STI) “Standard for Dual Wall Underground Storage Tanks” may be used as guidelines for aspects of the design and construction of underground steel double-walled tanks.

2. For double-walled UST systems, the sampling or testing method is capable of detecting a release through the inner wall;
3. For UST systems with a secondary barrier within the excavation area, the sampling or testing method used is capable of detecting any release within the area between the UST system and the secondary barrier;
4. The secondary barrier around the UST system consists of native soils or artificially-constructed material that is sufficiently thick and impermeable (at least 10-6 cm/sec) to permit containment and detection of a release;
5. The liner or barrier is compatible with the regulated substance stored so that a release from the UST system will not cause a deterioration of the barrier;
6. The ground water, soil moisture or rainfall will not render the testing or sampling method that is used inoperable so that a release could go undetected for more than 30 days;
7. The site is assessed to ensure that the secondary barrier is always above the ground water and not in a 25-year flood plain, unless the barrier and monitoring designs are for use under such conditions; and
8. Monitoring wells are clearly marked and secured to avoid unauthorized access and tampering.

4. For tanks with an internally-fitted liner, an automated device can detect a release between the inner wall of the tank and the liner, and the liner is compatible with the substance stored.
5. Any other type of release detection method, or combination of methods, can be used if it has been approved by the implementing agency. The implementing agency may approve such method if the owner and operator can demonstrate that the method is capable of detecting a release before it migrates beyond the excavation area as well as any of the methods allowed in paragraphs (c) through (f) of this section. If approved, the agency may impose any conditions on the use of the method that are necessary to protect human health and the environment.

§280.42 Additional requirements for piping.

(a) Except as provided in paragraph (c) of this section, each owner and operator of a new UST system must have release detection for the underground piping connected to each tank that meets the requirements in §§280.40 and 280.41.

(b) In addition to the requirements in paragraph (a) of this section, owners and operators of new UST systems with underground piping that conveys a regulated substance under pressure must also use a method of continuous release detection for such piping that is capable of automatically detecting and shutting off a release of at least 2 gallons per hour, unless the piping is provided with:

1. Interstitial monitoring in accordance with §280.41(h); or
2. Continuous monitoring in accordance with §280.41(d) through (f) or (i).
3. Owners and operators of new petroleum UST systems with underground piping that conveys petroleum under suction need not comply with the requirements in §§280.40 and 280.41 provided that:

1. The below-grade piping operates at less than atmospheric pressure;
2. The piping is sloped such that the contents of the pipe will drain back into the storage tank if the suction is released;
3. Only one check valve is included in each suction line;
4. The check valve is located directly below, and as close as practical to, the suction pump;
5. The suction piping run is installed with a minimum slope of 2 percent back to the connecting tank; and
6. The piping run does not have a foot valve that maintains regulated substances in the pipe for the purpose of priming the pump.

§280.43 Recordkeeping.

All UST system owners and operators must maintain records in accordance with §280.34 demonstrating compliance with all applicable requirements of this Subpart. These records must include the following:

1. All written performance claims pertaining to any release detection system used, and the manner in which these claims have been justified or tested by the equipment manufacturer or installer, must be maintained for five years from the date of installation;
2. The results of any sampling, testing or monitoring must be maintained for at least one year, except that the results of tank tightness testing conducted in accordance with §280.41(o)(1) must be retained until the next test is conducted as required under that Subsection; and
3. Written documentation of all calibration, maintenance and repair of release detection equipment must be maintained for at least one year after the servicing work is completed.

Subpart E—Release Reporting and Investigation

§280.50 Reporting of suspected releases and spills.

(a) Suspected releases requiring reporting. All UST owners and operators must report within 24 hours to the implementing agency any of the following conditions:

1. Test, sampling, or monitoring results from a release detection method or sampling, or monitoring results from a release detection method specified under §280.41 that indicate a release may have occurred;
2. Unusual operating conditions such as the erratic behavior of product dispensing equipment, the sudden loss of product from the UST system, an unexplained presence of water in the tank, or the physical presence of the regulated substance or an unusual level of vapors on the site that are of unknown origin;
3. Impacts in the surrounding area, such as evidence of regulated substances or resulting vapors in soils, basements, sewer and utility lines, and nearby surface water; and
4. An indication from a gas chromatography or equivalent method that there is a concentration of at least 100 parts per million of total hydrocarbons in a soil sample.

(b) Spill and overfill reporting. Any spill or overfill of a regulated substance that exceeds its reportable quantity under CERCLA (40 CFR 302) and any spill or overfill of petroleum that exceeds 25 gallons or causes a sheen on surface water shall be reported to the
implementing agency within 24 hours. Any spill or overfill of petroleum of 25 gallons or less must be contained and cleaned up immediately, and if such clean up cannot be accomplished within 24 hours, the implementing agency must be notified within 24 hours.

Note.—A release of a hazardous substance equal to or in excess of its reportable quantity must also be reported to the National Response Center immediately (not within 24 hours) under CERCLA Section 103. These reporting provisions (under CERCLA and RCRA Subtitle I) do not relieve the owner or operator of responsibility to take corrective action as necessary to protect human health and the environment, including containment and clean-up of spills that are not required to be reported.

§ 280.51 Release investigation and confirmation.

(a) Unless corrective action is initiated by the owner or operator under Subparts F and G, or is otherwise directed by the implementing agency, all suspected releases requiring reporting under § 280.50(a)(1), (a)(2), or (a)(4) must be immediately investigated by the owner or operator using one of the following applicable procedures of this section. Confirmation of a release by one of these methods will require the owner and operator to comply with the requirements for corrective action under Subparts F and G.

(1) A site-specific investigation, under the direction of the implementing agency, of the suspected release incident to determine if a release has occurred and reached soils outside of the excavation zone or ground water; 

(2) In the case of an UST system having secondary containment, an investigation of a possible release into the interstitial area between the UST and the secondary barrier using procedures that will determine if the interstitial monitoring is working properly;

(3) In the case of a failed tank or piping tightness test, an investigation in the following manner:

(i) A check of inventory records to detect a discrepancy that indicates a release may have occurred in accordance with the requirements in § 280.41(c)(1), (after the top of the tank has been excavated and all loose fitting, vent pipes or other equipment has been checked, replaced or tightened); and 

(ii) Analysis of soil core samples for hydrocarbon and/or chemical contamination in the unsaturated zone under the UST system.

(4) In the case of a discrepancy during inventory reconciliation in accordance with § 280.41(c)(2), or any other suspected release, an investigation conducted in the following manner:

(i) A tightness test of the tanks and piping that is conducted within seven days of the initial reporting to the implementing agency to determine if a release may have occurred in accordance with the requirements in § 280.50(a)(3) and

(ii) Analysis of soil core samples for hydrocarbon and/or chemical contamination in the unsaturated zone under the UST system.

(5) Any other investigation procedure that is no less stringent than any of the procedures in paragraphs (a)(1) through (a)(4) of this section and is approved for that UST system by the implementing agency.

§ 280.52 Off-site impacts and source investigation.

As required by the implementing agency, all suspected releases requiring reporting under § 280.50(a)(3) must be investigated and confirmed or disproved by the owner and operator to establish whether corrective action requirements must be followed under Subparts F and G. When a release of a regulated substance is suspected, the implementing agency may require the owner or operator to test the tanks and piping for tightness or structural soundness, or require a site investigation to ascertain the location, magnitude, and effect of the leaking UST system.

Subpart F—Corrective Action for UST Systems Containing Petroleum

§ 280.60 General.

Each owner and operator of an UST system containing petroleum shall, in response to a suspected or confirmed release from the UST system, comply with the requirements of this subpart. These requirements apply to all UST systems containing petroleum except USTs excluded under § 280.60(b).

§ 280.61 Initial abatement requirements and procedures.

(a) Upon confirmation of an actual release in accordance with Subpart E or discovery of a release in any other manner, the owners and operators shall:

(1) Report the release to the implementing agency within 24 hours in accordance with § 280.50;

(2) Stop any further release from the UST system;

(3) Mitigate fire and safety hazards;

(4) Remove and properly dispose of visibly contaminated soil from the excavation zone;

(5) Report initial corrective action taken, including a verification of tank repair or closure if appropriate, to the implementing agency within 20 days of confirmation or discovery of the release; and

(6) Conduct an investigation to determine the possible presence of free product and initiate free product removal as soon as practicable.

(b) The owners and operators must assemble from investigations of the site and the release, or from other sources (e.g., USGS maps, state and local agencies, SCS soil maps), such information as deemed necessary by the implementing agency for completing the corrective action measures required in paragraph (a) of this section. This information may include, but is not necessarily limited to, the following:

(1) Data on the nature and estimated quantity of the release;

(2) Data from surface and subsurface soil sampling and analyses;

(3) Data from ground water and/or surface water sampling and analyses; and

(4) Data from available sources and/or site investigations concerning surrounding populations, water quality and use, well locations, subsurface soil conditions, climatological conditions, and land usage.

(c) The information collected by the owners and operators during the course of the investigation under paragraph(a)(6) of this section must be submitted to the implementing agency according to the schedule established by the implementing agency under § 280.63. The implementing agency may request the collection and submission of additional information and/or a corrective action plan for additional soil and/or ground water cleanup.

§ 280.62 Free product removal.

At sites where an owner or operator’s investigations under § 280.61(a)(6) indicate the presence of free product, the owner or operator must remove free floating product to the maximum extent practicable while continuing, as necessary, any actions initiated under § 280.61, and while preparing for subsequent actions required under § 280.63. In meeting the requirements of this section, the owner or operator shall:
(a) Conduct free product recovery in such a manner that such actions do not spread contamination into previously uncontaminated areas through untreated discharge or improper disposal techniques.

(b) Handle any flammable products in a safe and competent manner to prevent fires or explosions.

(c) Unless directed to do otherwise by the implementing agency, prepare and submit, within 30 days, a free product removal report to the implementing agency that provides at least the following information:

1. The name of the person(s) responsible for implementing the plan;
2. The estimated quantity and type of product on site and the product thickness in wells, boreholes, and excavations;
3. Details of the product recovery system;
4. Whether any discharge will take place on or off site during the recovery operation;
5. The type of treatment and expected effluent quality from any discharge; and
6. The disposition of the recovered product.

§ 280.63 Additional site investigation.

(a) Whenever an investigation under § 280.61(b) indicates that there may be additional remaining soil contamination from the release, or a removal in compliance with § 280.61(a)(4) indicates that the released product or product from contaminated soil may have reached ground water, or as directed by the implementing agency, the owners and operators shall:

1. Conduct additional investigations of the release, the release site, and the surrounding area possibly affected by the release, to determine the full extent and location of soils contaminated by the release; and
2. Conduct additional investigations of the release, the release site, and the surrounding area possibly affected by the release to determine the presence of dissolved contamination due to the release in the ground water.

(b) The information collected by the owners and operators during the course of the investigations under paragraph (a) of this section must be submitted in accordance with a schedule established by the implementing agency.

(c) The implementing agency may request the submission of a corrective action plan for additional soil and/or ground-water cleanup.

§ 280.64 Soil and ground-water clean-up.

(a) Owners and operators required by the implementing agency under § 280.61(b) or (c) or § 280.63(c) to develop and submit a corrective action plan for responding to any contaminated soils or ground water shall submit such a plan according to a schedule established by the implementing agency.

(b) The implementing agency shall approve the corrective action plan only if it assures that implementation of the plan will provide adequate protection of human health, safety, and the environment. In making this determination, the implementing agency shall consider:

1. The physical and chemical characteristics of the regulated substance, including its toxicity, persistence, and potential for migration;
2. The hydrogeologic characteristics of the facility and the surrounding land;
3. The proximity, quality, and current and future uses of ground water;
4. An exposure assessment; and
5. The proximity, quality, and current and future uses of surface waters.

(c) Upon approval of the corrective action plan, the owners and operators shall implement the plan and monitor, evaluate, and report the results of implementation, as required by the implementing agency.

§ 280.65 Reporting.

(a) For purposes of reporting under § 280.61(a)(1), the owners and operators of an UST system containing petroleum shall report—

1. All below ground releases from the UST system in any quantity,
2. All above ground releases to land from the UST system in excess of 25 gallons, or less than 25 gallons if the owners and operators are unable to contain or clean up the release within 24 hours; and
3. All above ground releases to water which result in a sheen on the water.

(b) The owners and operators shall provide any additional information on corrective action beyond the initial notification required under § 280.61(a)(5) requested by the implementing agency.

§ 280.66 Public participation.

(a) For each corrective action plan submitted under § 280.63 and prior to the approval of that plan, the implementing agency shall provide an opportunity for public review and comment on the plan. The implementing agency shall provide notice to the public by means designed to reach those members of the public most directly affected by the release and the planned corrective action. Public notice shall provide adequate time for the review of the submitted plan by the affected public. Such notice may include, but is not limited to, public notice in local newspapers, including block advertisements, public service announcements, state register, or letters to individual households.

(b) If there is sufficient public interest, or for any other reason, the implementing agency may hold a public meeting to consider comments on the corrective action plan. The implementing agency shall hold a public meeting in any case where implementation of an approved corrective action plan does not achieve the established cleanup levels and termination of that plan is under consideration by the implementing agency.

(c) In deciding whether to approve or modify the corrective action plan, the implementing agency shall consider and respond to the comments from the public.

Subpart G—Corrective Action for UST Systems Containing Hazardous Substances

§ 280.70 General.

Each owner and operator of an UST system containing a hazardous substance shall, in response to a confirmed or actual release from the UST system, comply with the requirements of this subpart. These requirements apply to all UST systems containing hazardous substances (including UST systems containing mixtures of hazardous substances and petroleum) except UST systems excluded under § 280.10(b).

§ 280.71 Initial abatement requirements and procedures.

(a) Upon confirmation of a release in accordance with Subpart E, or the discovery of an above ground release in any other manner, the owners and operators shall comply with the following:

1. Cessation of use: prevent flow or addition of hazardous substances. The owner or operator must immediately stop the flow of the hazardous substance into the tank system or secondary containment system and inspect the system to determine the cause of the release.

2. Removal of hazardous substances from the tank system or secondary containment system. (i) If the release was from the tank system, the owners and operators must, within 24 hours after detection of the leak or, if the owners and operators demonstrate to the implementing agency that it is not possible, at the earliest practicable time, remove as much of the hazardous substance as is necessary to prevent...
further release of hazardous substances to the environment and to allow inspection and repair of the tank system to be performed.

(ii) If the material was released to a secondary containment system, all released materials must be removed within 24 hours or in a timely manner as determined by the implementing agency.

(3) Containment of visible releases to the environment. The owner and operator must immediately conduct a visual inspection of any above ground release and, based upon that inspection:

(i) Prevent further migration of the release to soils or surface water;

(ii) Remove, and properly dispose of, any visible contamination of the soil or surface water; and

(iii) Conduct an investigation to determine the possible presence of free product.

(b) In accordance with the reporting requirements of § 280.74, the owners and operators must assemble from investigation of the site and the release, or from other sources (e.g., USGS maps, state and local agencies, SCS soil maps), such information as deemed necessary by the implementing agency for completing the corrective action measures required in paragraph (a) of this section. This information may include, but is not necessarily limited to, the following:

(1) Data on the nature and estimated quantity of the release;

(2) Data from surface and subsurface soil sampling and analyses;

(3) Data from ground-water and/or surface water sampling and analyses; and

(4) Data from available sources and/or site investigations concerning surrounding populations, water quality and use, well locations, subsurface soil conditions, climatological conditions, and land usage.

§ 280.72 Additional site investigation.

(a) Whenever an investigation under § 280.71(b) indicates that there may be additional remaining soil contamination from the release, or a removal in compliance with § 280.71(a)(2) indicates that the released product or contaminated soil may have reached ground water, or as directed by the implementing agency, the owners and operators shall:

(1) Conduct additional investigations of the release, the release site, and the surrounding area possibly affected by the release to determine the full extent and location of soils contaminated by the release; and

(2) Conduct additional investigations of the release, the release site, and the surrounding area possibly affected by the release to determine the presence of dissolved contamination due to the release in ground water.

(b) The information collected by the owners and operators during the course of the investigations under paragraph (a) of this section must be submitted in accordance with a schedule established by the implementing agency.

(c) The implementing agency may request the submission of a corrective action plan for additional soil and/or ground-water cleanup.

§ 280.73 Soil and ground-water cleanup.

(a) The owners and operators required by the implementing agency under § 280.72(c) to develop and submit a corrective action plan for cleanup of any remaining contaminated soils or ground water shall submit such a plan in accordance with a schedule established by the implementing agency.

(b) Upon approval of the corrective action plan the owners and operators shall implement and monitor, evaluate and report the results of implementation to the implementing agency.

§ 280.74 Reporting.

(a) For purposes of reporting under § 280.71 the owners and operators of an UST containing hazardous substances shall report—

(1) All below ground releases in any quantity; and

(2) All above ground releases to land or surface waters in excess of the reportable quantity established under 40 CFR 302 for the released substance.

(b) Within 30 days of confirmation or discovery of a release to the environment, a report containing the following information must be submitted to the implementing agency:

(1) Likely route of migration of the release to the extent known from available information;

(2) Characteristics of the surrounding soil (soil composition, geology, hydrogeology, climate);

(3) Results of any monitoring or sampling conducted in connection with the release (if available). If sampling or monitoring data relating to the release are not available within 30 days, these data must be submitted to the implementing agency as soon as they become available.

(4) Proximity to downgradient drinking water, surface water, and population areas; and

(5) Description of response actions taken or planned.

(c) The owners and operators shall provide any additional information on corrective action beyond the initial notification required under 280.81 requested by the implementing agency.

§ 280.75 Public participation.

(a) For each corrective action plan submitted under § 280.73 and prior to the approval of such plan, the implementing agency shall provide an opportunity for the public review and comment on the plan. The implementing agency shall provide notice to the public by means designed to reach those members of the public most directly affected by the release and the planned corrective action. Public notice shall provide adequate time for the review of the submitted plan by the affected public. Such notice may include, but is not limited to, public notice in local newspapers, block announcements, public service announcements, state register, or letters to individual households.

(b) If there is sufficient public interest, or for any other reason, the implementing agency may hold a public meeting to consider comments on the corrective action plan. The implementing agency shall hold a public meeting in any case where implementation of an approved corrective action plan does not achieve the established clean-up levels and termination of that plan is under consideration by the implementing agency. In deciding to approve or modify the corrective action plan, the implementing agency shall consider and respond to the comments from the public.

Subpart H—Out-of-Service UST Systems and Closure

§ 280.80 Temporary removal from use, temporary closure, and permanent closure.

(a) When an UST system is taken out of service for less than 3 months and for regulated substances are left in the tank, the owner or operator must continue operation and maintenance as required in § 280.31, release detection as required in § 280.41, and must comply with Subparts E, F and G if a release is suspected or confirmed.

(b) When an UST system is taken out of service for 3 months or more but less than 24 months, and regulated substances are left in the tank, the owner and operator must comply with paragraph (a) of this section and meet the following additional requirements:

(1) Leave vent lines open and functioning;

(2) Cap and secure all-through lines, pumps, manways, and ancillary equipment.

(c) When an UST system is taken out of service for longer than 24 months, it must be permanently closed.
This requirement is satisfied if one of the operators must maintain records in paragraph "Underground Service Station Tanks" may be abandoned or removed of Used Requirements of Subparts F and must comply with the corrective action other manner, the owner or operator result of the activities under paragraphs and did not conform with paragraph (f) the effective date of these regulations system closures that took place before that has been approved contamination in the unsaturated zone; hydrocarbon and/or chemical uses:

- Permanent closure, the owner or operator maintained for at least three years after closure, or if the owner or operator took the following ways:
  - (i) By the owner and operator who took the UST system out of service;
  - (ii) By the current owner and operator of the UST system; or
  - (iii) By mailing these records to the implementing agency if they cannot be maintained at the closed facility.

**BILLY CODE 6500-50-M**

**40 CFR Part 280**

**[FRL-3154-7]**

**Underground Storage Tanks Containing Petroleum; Financial Responsibility Requirements**

**AGENCY:** Environmental Protection Agency.

**ACTION:** Proposed rule.

**SUMMARY:** The Environmental Protection Agency (EPA) is proposing financial responsibility requirements applicable to owners and operators of underground storage tanks containing petroleum under section 9003 (c) and (d) of the Resource Conservation and Recovery Act (RCRA) as amended by the Hazardous and Solid Waste Amendments of 1984 (HSWA) and the Superfund Amendments and Reauthorization Act of 1986 (SARA). This proposal would establish requirements for demonstrating financial responsibility for taking corrective action and compensating third parties for bodily injury and property damage caused by sudden and nonsudden accidental releases arising from operating an underground storage tank containing petroleum.

**DATES:** The Agency will consider all comments received by June 6, 1987 before taking final action on the proposed rule. Three public hearings will be held on the following dates:

1. May 28 (and 29, if necessary), 1987—Washington, DC; (2) June 1 (and 2, if necessary), 1987—Dallas, Texas; and (3) June 4 (and 5, if necessary), 1987—San Francisco, California.

**ADDRESSES:** Comments may be mailed to the Docket Clerk (Docket No. UST-3), Office of Underground Storage Tanks [WH-562A], U.S. Environmental Protection Agency, 401 M Street SW, Washington, DC 20460. Comments received by EPA, and all references used in this document, may be inspected in the public docket, located in Room LG–100, U.S. Environmental Protection Agency, 401 M Street SW, Washington, DC 20460, from 9:30 a.m. to 4:00 p.m., Monday through Friday, excluding Federal holidays.

The Agency will hold public hearings on today's proposal at three different locations indicated below:

1. The Westin Hotel, 2401 M Street NW, Washington, DC 20037
2. The Registry Hotel, 15201 Dallas Parkway, Dallas, TX 75248
3. Miyako Hotel, 1625 Post Street, San Francisco, CA 94015.

The hearings will begin at 9:30 a.m., with registration at 9:00 a.m. The hearings will end at 4:30 p.m., unless concluded earlier. Anyone wishing to make a statement at a hearing should notify, in writing, Ms. Bern Waldorf, Hearings Coordinator, Office of Underground Storage Tanks [WH–562A], U.S. Environmental Protection Agency, 401 M Street SW, Washington, DC 20460. Comments received by EPA, and all references used in this document, may be inspected in the public docket, located in Room LG–100, U.S. Environmental Protection Agency, 401 M Street SW, Washington, DC 20460, from 9:30 a.m. to 4:00 p.m., Monday through Friday, excluding Federal holidays.

**FOR FURTHER INFORMATION CONTACT:** The RCRA/Superfund Hotline at (800) 424-9346 (toll free) or (202) 382-3000 in Washington, DC.

**SUPPLEMENTARY INFORMATION:** The contents of today's preamble are listed in the following outline:

I. Authority
II. Background
A. Legislative and Regulatory Overview
   1. RCRA Subtitle I
   2. CERCLA Reauthorization
   3. Leaking Underground Storage Tank Trust Fund
B. Key Provisions of Today's Proposal
C. Rationale for the Agency's Approach
D. Amount of Required Coverage
E. Description of the Regulated Community
   1. Background
   2. Owners and Operators in Retail Motor Fuel Marketing
   3. Owners and Operators in Other Sectors
F. Overview of Proposed Rule

III. Section-by-Section Analysis
A. Applicability (§ 280.90)
   1. Owner or Operator
   2. New Tanks
   3. Tanks Taken Out of Operation
   4. State and Federal Government Entities
   5. Exemptions
   6. Deferrals
B. Definition of Terms (§ 280.91)
   1. Accidental Release
   2. Bodily Injury
   3. Controlling Interest
   4. Legal Defense Costs
   5. Occurrence
   6. Property Damage
   7. Provider of Financial Assurance
   8. Substantial Business Relationship
   9. Tangible Net Worth
C. Amount and Scope of Required Coverage (§ 280.92)
   1. Per Occurrence Amount
   2. Aggregate Amounts
   3. Apportionment of Costs
4. Level of Coverage Under Separate Mechanisms

D. Allowable Mechanisms and Combinations of Mechanisms (§ 280.93)

1. Allowable Mechanisms
2. Allowable Combinations of Mechanisms
3. Allowable Mechanisms and Types of Costs Covered
4. Mechanisms Considered But Not Proposed

E. Financial Test of Self-Insurance (§ 280.94)

1. Features of Mechanism
2. Applicability to UST Requirements
3. Comparison of Subtitle I Financial Test of Self-Insurance with the Subtitle C Test for Liabilities
4. Availability

F. Guarantee (§ 280.95)

1. Features of Mechanism
2. Applicability to UST Requirements
3. Availability
4. Qualifications of Guarantors

G. Indemnity Contract (§ 280.96)

1. Features of Mechanism
2. Applicability to UST Requirements
3. Availability

H. Insurance and Risk Retention Group Coverage (§§ 280.97 and 280.98)

1. Features of Mechanisms
2. Applicability to UST Requirements
3. Availability

I. Surety Bond (§ 280.99)

1. Features of Mechanism
2. Applicability to UST Requirements
3. Availability
4. Qualifications of the Surety Company

J. Letter of Credit (§ 280.100)

1. Features of Mechanism
2. Applicability to UST Requirements
3. Availability
4. Letters of Credit
5. Qualifications of Issuing Institution

K. Use of State-Required Mechanism (§ 280.101)

L. State Financial Assurance (§ 280.102)

M. Standby Trust Fund (§ 280.103)

1. Features of Mechanism
2. Applicability to UST Requirements
3. Timings

N. Substitution of Financial Assurance Mechanisms by an Owner or Operator (§ 280.104)

O. Cancellation or Nonrenewal by a Provider of Financial Assurance (§ 280.105)

P. Reporting by Owner or Operator (§ 280.106)

Q. Recordkeeping (§ 280.107)

R. Accounting on Financial Assurance Mechanisms (§ 280.108)

1. Corrective Action Claims
2. Third-Party Compensation Claims
3. Payout of the Funds Drawn

S. Release from the Requirements of this Subpart (§ 280.109)

1. Need for Funds After Closure and Corrective Action
3. Release from Requirements One Year After Completion of Permanent Closure or One Year After Completion of Permanent Closure and Corrective Action

T. Bankruptcy or Other Incapacity of Owner or Operator or Provider of Financial Assurance (§ 280.110)

U. Suspension of Enforcement (§ 280.111)

1. Eligible Applicants
2. Demonstrating Unavailability of Financial Assurance
3. Recordkeeping Requirements
4. Additional Criteria for Obtaining Initial Suspension
5. Initial Suspension Application Procedures
6. Criteria for Renewal of Suspension
7. Procedures for Suspension Renewals

IV. Major Differences Between This Proposal and Subtitle C Financial Responsibility Rules

V. Integration with Other EPA Programs

A. Other Subtitle I Rulemakings
B. Leaking Underground Storage Tank (UST) Trust Fund and Response Program
VI. State Program Approval

VII. Economic and Regulatory Impacts

A. Regulatory Impact Analysis
1. Compliance with Executive Order 12291
2. The Regulated Community
3. Assumptions and Methodology Used in the RIA
4. Annual Real Resource Costs
5. Economic Impacts
6. Benefits

B. Regulatory Flexibility Act
C. Paperwork Reduction Act

VIII. Supporting Documents
IX. List of Subjects in 40 CFR Part 280

I. Authority

These regulations are issued under the authority of sections 2002, 9001, 9002, 9003, 9004, 9005, 9006, 9007 and 9008 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, as amended by the Hazardous and Solid Waste Amendments of 1984 (Public Law 98–618) and the Superfund Amendments and Reauthorization Act of 1986 (Public Law 99–499) (42 U.S.C. 6921, 6991, 6991(a), 6991(b), 6991(c), 6991(d), 6991(e), 6991(f), and 6991(h)).

II. Background

This section provides a legislative and regulatory overview of EPA's program for regulating underground storage tanks (USTs) and describes the key provisions of today's proposed rules, the rationale for the Agency's approach to financial responsibility requirements, the required amounts of coverage, the regulated community, and an overview of the proposed rule. Section III of this preamble, "Section-By-Section Analysis," describes each provision of the rule.

A. Legislative and Regulatory Overview

1. RCRA Subtitle I. On November 8, 1984, the President signed into law the Hazardous and Solid Waste Amendments of 1984, Public Law 98–618. These amendments extended and strengthened the provisions of the Solid Waste Disposal Act of 1976 as amended by the Resource Conservation and Recovery Act of 1978 (RCRA). One portion of this legislation, Subtitle I, provided for the development and implementation of a regulatory program for underground storage tanks (USTs) to contain "regulated substances," which are defined as: petroleum; and hazardous substances listed under section 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), excluding hazardous wastes regulated under RCRA Subtitle C.1

Section 9003(a) of Subtitle I requires the EPA Administrator to promulgate requirements for release detection, prevention, and correction as necessary to protect human health and the environment. These requirements are being proposed and discussed separately elsewhere in today's Federal Register. Prior to the Superfund Amendments and Reauthorization Act of 1986 (SARA), section 9003(d) of Subtitle I provided the EPA Administrator with the discretion to establish a financial responsibility program for USTs. Under this section, the Administrator could require

1 "Underground storage tank" is defined under RCRA Subtitle I, section 9001(1) as "any one or combination of tanks (including underground pipes connected thereto) which is used to contain an accumulation of regulated substances, and the volume of which (including the volume of the underground pipes connected thereto) is 10 percent or more beneath the surface of the ground. Such term does not include any—
(A) farm or residential tank of 1,100 gallons or less capacity used for storing motor fuel for noncommercial purposes,
(B) tank used for storing heating oil for consumptive use on the premises where stored,
(C) septic tank,
(D) pipeline facility (including gathering lines) regulated under—
(i) the Natural Gas Pipeline Safety Act of 1968 (49 U.S.C. App. 171, et seq.),
(iii) which is an intrastate pipeline facility regulated under State laws comparable to the provisions of law referred to in clause (i) or (ii) of this subparagraph.
(E) surface impoundment, pit, pond or lagoon,
(F) storm water or waste water collection system,
(G) flow-through process tank,
(H) liquid trap or associated gathering lines directly related to oil or gas production and gathering operations, or
(I) storage tank situated in an underground area (such as a basement, cellar, mineworking, drift, shaft or tunnel) if the storage tank is situated upon or above the surface of the floor."
demonstration of financial responsibility for taking corrective action and compensating third parties, if deemed necessary and desirable, by means of compensating third parties, if deemed necessary and desirable, by means of financial responsibility for owners or operators in that State. Suspension of enforcement can be granted for a period of up to 180 days. At the end of that period, the Administrator may extend the suspension for an additional period not exceeding 180 days if he finds that substantial progress has been made in establishing a risk retention group, or that it is not possible to establish such a group and the State is unwilling or unable to establish a fund.

2. CERCLA Reauthorization. Section 205 of the Superfund Amendments and Reauthorization Act of 1986 (SARA) amends sections 9003(c) and (d) of Subtitle I to require the Agency to promulgate regulations requiring that owners or operators of underground storage tanks maintain evidence of financial responsibility for taking corrective action and compensating third parties for bodily injury and property damage caused by sudden and nonsudden accidental releases arising from operating an underground storage tank. In addition to the allowable financial assurance mechanisms originally provided for in Subtitle I, SARA amends section 9003(d)(1) to enable the Administrator to allow use of “any other method” that he finds satisfactory.

SARA establishes a minimum amount of financial responsibility at $1 million per occurrence for USTs at facilities that are engaged in petroleum production, refining, or marketing, and an appropriate aggregate amount that the Administrator may establish. The Administrator is given the authority to establish higher per-occurrence levels of financial responsibility for particular classes or categories of USTs containing petroleum. The Administrator is also authorized under section 9003(d)(5)(B) to set minimum amounts lower than $1 million per occurrence “for underground storage tanks containing petroleum which are at facilities not engaged in petroleum production, refining, or marketing and which are not used to handle substantial quantities of petroleum.”

Section 9003(d) was further amended by SARA to authorize the Administrator to suspend enforcement of the financial responsibility requirements for a particular class or category of USTs or in a particular State, if the Administrator determines that methods of demonstrating financial responsibility “are not generally available” to owners or operators in those classes, categories, or States. Before enforcement can be suspended, the Administrator must be satisfied either that steps are being taken to form a risk retention group for the class of tanks for which the suspension is sought or that the State is taking steps to establish a fund to provide evidence of financial responsibility.

3. Leaking Underground Storage Tank Trust Fund. SARA amended Subtitle I by adding to section 9003 a new Subsection (h) which establishes a response program for releases from USTs containing petroleum. As part of this program, SARA establishes a $500 million Leaking Underground Storage Tank (UST) Trust Fund for payment of costs for corrective action, enforcement action, and recovery of costs incurred by the Administrator or a State. Before the effective date of requirements promulgated under section 9003(c), the Administrator or State may use funds from the Leaking UST Trust Fund to pay for corrective action whenever such action is considered necessary by the Administrator or State to protect human health and the environment and to pay for enforcement and cost-recovery activities. After the effective date of the regulations, the Fund will pay for corrective action costs if any one of the following conditions exists:

1. No owner or operator can be found, within 90 days or such shorter period as may be necessary to protect human health and the environment, who is subject to the corrective action regulations and capable of carrying out such corrective action properly;
2. Prompt action by EPA or a State is necessary to protect human health or the environment;
3. Corrective action costs exceed the required amount of financial responsibility and, considering the class or category of UST, expenditures are necessary to assure an effective corrective action; or
4. The owner or operator has failed or refused to comply with an order to perform corrective action.

However, section 9003(b)(11) restricts the use of Fund monies at any facility where the owner or operator has not complied with the applicable financial assurance requirements. In these circumstances, the Fund can be used only if there is no solvent owner or operator, immediate action is required in response to an imminent and substantial endangerment of human health or the environment, or the necessary action involves temporary or permanent relocation of residents, alternative water supplies, or an exposure assessment, undertaken to protect human health.

The integration of the Leaking UST Trust Fund provisions with today’s proposed financial responsibility requirements for USTs containing petroleum is further discussed in Section V of this preamble.

B. Key Provisions of Today’s Proposal

In today’s rulemaking, EPA proposes, as Subpart I of 40 CFR Part 280, requirements for a program of financial responsibility for the costs of taking corrective action and compensating third parties for bodily injury and property damage caused by accidental releases from USTs containing petroleum. An advance notice of proposed rulemaking on financial responsibility for USTs containing regulated substances other than petroleum, including mixtures of petroleum and other regulated substances will be published subsequent to today’s proposal. Hereinafter, the term “UST containing petroleum” is used to refer to an underground storage tank that contains petroleum.

Today’s proposed financial responsibility requirements are applicable to owners or operators of USTs containing petroleum. Federal and State entities that own or operate USTs containing petroleum are exempt from the proposed financial responsibility rules and are not required to obtain special financial assurance mechanisms or otherwise demonstrate financial responsibility. All other owners or operators subject to these requirements must demonstrate financial responsibility by using or obtaining one or more of the following mechanisms: financial test of self-insurance, guarantee, indemnity contract, insurance, risk retention group coverage, surety bond, letter of credit, State-required mechanism, State fund, or other State assumption of responsibility. The rule specifies the conditions under which these mechanisms may be used and how these mechanisms can be combined to provide the required financial assurance.

Today’s proposed rule requires $1 million per-occurrence coverage for all USTs for the costs of taking corrective action and compensating third parties. The rule also requires annual aggregate amounts to cover all releases from all petroleum-containing USTs owned or operated by an entity. The required aggregate levels have been set according to the number of tanks owned or operated.
The proposed rule does not apportion the required amount of financial assurance coverage between corrective action and third-party compensation costs. The required amount, therefore, must be available to cover whatever types of costs arise. If, however, costs are covered by different mechanisms, the amount of coverage for each type of cost must be equal to the minimum required amount.

Under the proposed rule, an owner or operator is required to maintain evidence of financial responsibility at the underground storage tank site or place of business. Evidence of financial assurance need not be submitted to EPA, except in the following circumstances:

—When notifying EPA of the installation of a new petroleum underground storage tank under proposed 40 CFR 280.22 (see UST technical standards proposed elsewhere in today's Federal Register);
—Within 30 days of a known or suspected release; and
—When coverage is being cancelled or otherwise rendered ineffective and the owner or operator is unable to obtain alternate financial assurance within a specified time period.

Owners or operators will be released from the financial responsibility requirements one year after closure of their USTs unless a release is detected or suspected, in which case they will be released one year after closure and any required corrective action is complete. An owner or operator must also maintain, at the tank site or place of business, a certification of compliance with Subpart I, which identifies the financial assurance mechanism or combination of mechanisms used to comply with the rules.

The proposed rules codify the provisions for obtaining an initial suspension of enforcement and a renewal of suspension, as established under section 9003(d)(5)(D). To suspend enforcement, the Administrator must determine that the financial assurance mechanisms are "not generally available" to the owners and operators in the particular class or State, and either steps are being taken to form a risk retention group, or a State is taking steps to establish a fund to be used as evidence of financial responsibility. Suspension of enforcement may be granted for a period not exceeding 180 days, with extensions of additional periods not exceeding 180 days if the Administrator continues to find that the allowable mechanisms are still generally unavailable to those owners or operators. To extend the suspension, the Administrator must also find that substantial progress has been made in establishing the retention group, or that it is not possible to establish such a group and the State is unwilling or unable to establish a fund. Section 280.111 of the proposed rule describes in detail the criteria and procedures that the Agency will use in reviewing requests for suspension of enforcement. Suspension of enforcement is discussed in detail in Section III.U of this preamble.

C. Rationale for the Agency's Approach

Releases arising from the operation of underground storage tanks containing petroleum may occur at any time. Once the owner or operator of an underground storage tank realizes that a release has occurred, he is immediately faced with a number of financial demands. First, the owner must spend money to detect the source of the release and to stop it to protect inventory and minimize cleanup costs. Then the owner must clean up the release to protect property value, to comply with State and Federal requirements to perform corrective action, and to prevent future liability (i.e., to prevent the release from damaging the health or property of others). Finally, the owner must compensate third parties for any property damage, bodily injury, or other harm the release may have caused.

EPA estimates that corrective action costs will typically range between $3,000 and $300,000. Third-party compensation costs, when incurred, are often in excess of $300,000. EPA's analyses show that all small businesses without financial protection will have difficulty meeting any but the lowest levels of corrective action costs. Even large firms may have difficulty meeting these costs if they own more than a few tanks and are faced with paying the costs associated with multiple releases. For these reasons, many UST owners and operators are already obtaining financial assurance for the risks posed by their USTs. The most common form of financial assurance is insurance. Many owners and operators of USTs already have pollution liability insurance to ensure that the costs of any potential UST releases will be paid. However, many other owners and operators have had difficulty obtaining pollution liability insurance.

Recognizing that many UST owners or operators currently cannot obtain insurance, EPA is proposing a financial responsibility program that will allow owners or operators to demonstrate evidence of financial responsibility through a wide variety of mechanisms, both private (i.e., a financial test of self-insurance, insurance, risk retention group coverage, surety bonds, letters of credit, guarantees, indemnity contracts, and State-required mechanisms) and public (i.e., State funds and other State assurances). The Agency took this approach so that owners and operators would have a wide variety of mechanisms to choose from and so that State agencies could include in their programs the broadest possible choice of equivalent mechanisms.

Some mechanisms allowed under today's proposal will not be available to all owners or operators. In particular, some responsible owners or operators will not be able to qualify as self-insurers and will not be able to obtain private assurance mechanisms from insurers, banks, sureties, or other providers of financial assurance. Furthermore, the Agency recognizes that some of the proposed financial assurance mechanisms (i.e., indemnity contracts, surety bonds, and letters of credit) have not traditionally been used to provide coverage for third-party liability claims. The Agency expects that some States will establish corrective action and third-party compensation programs to cover the financial responsibility obligations of UST owners or operators who may be unable to obtain other types of coverage. In addition, some classes or categories of UST owners or operators may form risk retention groups if more traditional insurance coverage is not available.

Given the limited availability of insurance and private assurance mechanisms to some UST owners and operators and for some types of required coverage, the formation of risk retention groups (which are captive insurance companies) and the creation of State funds or other State assurances appear to be promising approaches for achieving EPA's goal of ensuring that almost all UST owners and operators will be able to pay for the costs of taking corrective action and compensating third parties if releases from their USTs make such expenses necessary.

In establishing the required amount of financial assurance, the Agency decided to establish one minimum per-occurrence level for all owners or operators regulated under the proposed rule. The Agency rejected the option of establishing classes for purposes of setting different per-occurrence levels for several reasons. First, while many of the factors that could be used to establish such classes (such as age of the tank or tank material) may affect the likelihood of a release, they do not
affect the costs of a release once that release has occurred. (As discussed later in Section III.C on "Amount and Scope of Required Coverage," while the probability of a release is not an appropriate factor for determining per-occurrence amounts of coverage, it is an important factor in setting aggregate levels of coverage.) Second, while the costs of a release are affected by the proximity of a leaking UST to ground water, using location to establish classes of USTs in order to set appropriate levels of financial assurance was not considered to be a feasible procedure, given the large number of USTs to be regulated and the fact that many owners and operators have multiple USTs at different locations.

The Agency is proposing required aggregate levels of coverage according to the number of tanks owned or operated, because the amount of funds needed for corrective action or third-party compensation will increase as the number of USTs for which an owner or operator is responsible increases. The Agency decided not to base aggregate levels on tank characteristics, since a significant number of USTs and operators have many tanks with different characteristics. This type of classification or categorization scheme might be difficult to develop and implement for purposes of financial assurance. The aggregates being proposed have been set at levels sufficiently high that UST owners or operators will not incur costs that exceed the aggregates more than one percent of the time. Again, the Agency considers this level of financial assurance to be fully consistent with its mandate to protect human health and the environment.

EPA's statutory mandate authorizes the suspension of enforcement of the financial responsibility regulations for classes of USTs in specified circumstances. (See Section III.U of the preamble for a detailed description of EPA's proposed procedures for implementing this suspension of enforcement.) In allowing for enforcement suspensions, Congress recognized that some owners or operators may initially have difficulty coming into compliance with financial responsibility requirements. To address this difficulty, EPA's proposed procedures are intended to make initial suspensions relatively easy to obtain. At the same time, however, EPA wished to avoid abuses of the suspension provisions and is therefore proposing procedures that owners or operators who seek to obtain a suspension by demonstrating that they are attempting to form a risk retention group must make a binding financial commitment to the group of $2,000 (the average expected UST insurance premium per facility for the coverage required by the proposed rule). In many cases, owners and operators must contribute substantially larger sums to capitalize the risk retention group adequately. Furthermore, EPA is proposing to make renewals of suspension of enforcement progressively more difficult to obtain than an initial suspension, in order to discourage owners and operators from seeking repeated suspensions. EPA believes this approach is consistent with the language and intent of the law and requests comments on this position.

In developing the analytical basis for the proposed rule being published today, EPA has drawn upon its experience with other financial responsibility programs designed to cover environmental costs. The RCRA Subtitle C program, which requires owners or operators of hazardous waste treatment, storage, and disposal facilities (TSDFs) to demonstrate financial responsibility for closure, post-closure care, and third-party liability coverage, provided an important precedent for the proposed UST financial responsibility program. This program has been in effect for almost six years. The Agency's recent proposal that hazardous waste TSDFs with known continuing releases be required to demonstrate financial responsibility for corrective action also served as a model for the proposed rule. (51 FR 37854, October 24, 1986.)

Most of the types of financial assurance mechanisms allowed in the Subtitle C program are being proposed for UST owners and operators. (The one exception is a gradually-funded trust, which is not being proposed for Subtitle B but which is allowed under Subtitle C for closure and post-closure financial assurance and has been proposed for financial assurance for corrective action for continuing releases. See Section III.D.4.a of this preamble.) The Subtitle C and the proposed Subtitle I financial responsibility programs are also similar in that they allow owners or operators to meet financial responsibility requirements by (1) their own funds, (2) risk retention group guarantees and indemnity contracts, and (3) financial commitment by another party.

The major differences between the proposed Subtitle I program and the Subtitle C program are in the former's less stringent reporting requirements, its broader range of allowable financial assurance mechanisms, and its incorporation of suspension of enforcement provisions. Some of the differences between the two regulatory programs reflect differences in the regulated communities, particularly in terms of numbers of owners and operators. Because the UST regulated community is many times larger than the Subtitle C community, the administrative burden of implementing the Subtitle I program was a key factor taken into account in formulating today's proposed rule.

As a new program, the Subtitle I financial responsibility requirements also afford the Agency an opportunity to find new ways to address the problem of unavailability of financial assurance to some owners and operators—a problem that the Agency has encountered in its implementation of Subtitle C liability coverage requirements. Thus, while experience under the Subtitle C financial responsibility program has provided important precedents for use in rulemaking for UST financial responsibility, EPA expects the development and implementation of the Subtitle I program to enhance its ongoing refinement of Subtitle C financial responsibility requirements. The specific differences between the Subtitle C financial responsibility program and the proposed requirements for USTs containing petroleum are discussed in Section III, "Section-by-Section Analysis," and in Section IV "Major Differences between this Proposal and Subtitle C Financial Responsibility Rules." Following, however, is a brief summary of two of the major differences and the rationale for these differences.

- Types of Allowable Mechanisms. The proposed UST requirements introduce several mechanisms that are not used or proposed for use under Subtitle C. These include non-parent guarantees and indemnity contracts. EPA proposes to allow non-parent guarantees and indemnity contracts because (1) they should provide adequate financial assurance, and (2) they increase the financial assurance options available to a significant number of UST owners or operators who do not have corporate parents but who do have substantial business
relationships with other firms. Non-parent guarantees and indemnity contracts offer a means for these other entities to provide financial assurance to a UST owner or operator.

* Reporting Requirements. Under the proposed UST requirements, evidence of financial responsibility must be reported to EPA when financial assurance is likely to be needed (e.g., in the event of a known or suspected release, or when an owner or operator fails to get alternate assurance after receipt of a notice of cancellation for an existing mechanism). Owners or operators of Subtitle C treatment, storage, and disposal facilities are, in contrast, required routinely to submit evidence of current financial responsibility. The less stringent approach proposed for UST owners or operators reflects the infeasibility of EPA's routinely reviewing information from up to hundreds of thousands of owners and operators.

Furthermore, EPA does not believe that a less stringent approach to reporting will necessarily result in an unacceptable rate of noncompliance with the rules. First, although reporting is not required as a routine matter, today's proposal requires owners and operators to certify compliance with the rules. In addition, many UST owners and operators already carry insurance for the required coverages being proposed today, indicating that adequate incentives exist to limit financial risk even in the absence of regulation. Other features of the Subtitle I program should encourage compliance with financial responsibility requirements. For example, § 9003(h) restricts the expenditure of monies from the Leaking UST Trust Fund for facilities whose owner or operator is not in compliance with the financial responsibility requirements. In such a case the owner or operator would be liable for the entire cost of a corrective action, whereas the owner or operator who complies with the financial responsibility requirements is eligible for Trust Fund money for those corrective action costs that exceed the required amount of financial assurance coverage.

D. Amount of Required Coverage

Today's rule provides that all owners or operators of petroleum-containing USTs demonstrate evidence of financial responsibility in the amount of $1 million per occurrence for taking corrective action and compensating third parties for bodily injury and property damage caused by accidental releases arising from operating an underground storage tank. The aggregate amount of coverage required varies according to the number of tanks that are covered by the owner or operator. EPA is proposing the following aggregate levels:

<table>
<thead>
<tr>
<th>Aggregate level</th>
<th>Number of tanks covered</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1 million</td>
<td>1-12</td>
</tr>
<tr>
<td>$2 million</td>
<td>13-40</td>
</tr>
<tr>
<td>$3 million</td>
<td>41-60</td>
</tr>
<tr>
<td>$4 million</td>
<td>61-140</td>
</tr>
<tr>
<td>$5 million</td>
<td>141-250</td>
</tr>
<tr>
<td>$6 million</td>
<td>251+</td>
</tr>
</tbody>
</table>

RCRA § 9003(d)(5)(C) provides the Administrator with the authority to establish classes or categories of underground storage tanks for the purposes of setting coverage levels. The Administrator may consider, but is not limited to, the following factors:

- Size, type, location, storage, and handling capacity of the tanks;
- Volume of petroleum handled by such tanks;
- Likelihood of release and the potential extent of damage from any release;
- Economic impact of the coverage limits, especially on small businesses in the retail motor fuel marketing sector;
- Availability of methods of financial responsibility in amounts greater than the coverage amount specified in the statute;
- Other pertinent factors.

The Agency considered basing the coverage amounts per occurrence and in the aggregate on the factors listed above but rejected this approach except in one case: as discussed below, special consideration has been given to the economic plight of owners and operators of retail motor fuel outlets, the majority of whom are engaged in "small business" operations.

EPA's reasons for requiring all owners or operators to demonstrate evidence of financial responsibility at the $1 million per-occurrence level, as well as a description of the methodology used to set the aggregate levels included in today's proposal are presented below. A more complete analysis of how the aggregate levels were established is included in the supporting document for this rule, which is available in the docket.

The Agency has decided not to apportion per-occurrence and aggregate coverage between corrective action and third-party compensation for the reasons presented in Section III, "Section-by-Section Analysis." Consequently, the proposed rule requires that owners or operators who use one financial assurance mechanism to cover corrective action costs and another to cover third-party liability claims have $1 million per-occurrence coverage and the appropriate aggregate coverage under each of these mechanisms. Similarly, as also discussed in the section-by-section analysis, if an owner or operator uses one mechanism to cover liability claims arising from sudden releases and another mechanism to cover liability claims arising from nonsudden releases, each mechanism must carry the minimum $1 million per-occurrence coverage and the appropriate aggregate coverage for the number of tanks owned or operated.

Nothing in the proposed rule denies States the opportunity to set more restrictive financial responsibility requirements. States may choose, for example, to require higher coverage levels for particular owners or operators of petroleum USTs. However, to receive approval of their UST programs under § 9004 States may not set coverage levels lower than the minimum amounts specified in this rule. (The requirements and procedures for State program approval are proposed elsewhere in today's Federal Register.)

At this time, the Agency cannot predict the net effect of the UST regulation on the level of per-occurrence or aggregate costs. The industry's awareness of and compliance with the leak detection requirements being proposed today in 40 CFR Part 280, Subpart D, may result in a lower average per-occurrence cost because releases may be detected sooner. It is harder to assess the effect that leak detection requirements will have on the level of aggregate costs. Because aggregate costs are composed of a series of occurrence costs, lower occurrence costs should result in lower aggregate costs. This effect may be countered, however, by the fact that more leaks will be detected, thus raising the levels of aggregate costs. One potential effect of promulgating corrective action requirements, however, may be to increase the levels of both occurrence and aggregate costs because of the application of stricter cleanup standards. If future levels of occurrence and aggregate costs show that they have been seriously overestimated or underestimated by the Agency, it may be necessary for EPA to revise the levels of required coverage in the future.

E. Description of the Regulated Community

1. Background. USTs containing petroleum and subject to Subtitle I jurisdiction are owned or operated by firms engaged in the business of retail
motor fuel marketing and by firms storing petroleum products for purposes other than retail motor fuel sales. A large number of USTs containing petroleum are also owned by governments at the Federal, State, and local level.

EPA estimates that, of the total population of 1.4 million petroleum USTs to be regulated under Subtitle I, more than half (approximately 695,000) are used for the purpose of storing motor fuels (e.g., leaded gasoline, unleaded gasoline, gasohol, diesel fuel) for retail sale. Approximately 651,000 USTs are used for the storage of petroleum products for purposes other than retail motor fuel sales. These estimates exclude those petroleum-containing USTs for which regulation has been deferred (e.g., used oil tanks) both in this proposed rule and in the proposed technical standards rule published elsewhere in today's Federal Register. Exhibit I shows EPA's current estimates of the UST population that will be subject to the proposed rules, distributed according to industry sector. Approximately 39 percent of the facilities to be regulated are engaged in the retail sale of motor fuels. The 61 percent of facilities having USTs that store petroleum products used for purposes other than the retail sale of motor fuels are found in every major sector of the U.S. economy.
Exhibit 1  PETROLEUM UST POPULATION BY INDUSTRY SECTOR

<table>
<thead>
<tr>
<th>Industry Sector</th>
<th>Number of Tanks</th>
<th>Number of Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>RETAIL MOTOR FUEL SALES</td>
<td>695,000</td>
<td>193,000</td>
</tr>
<tr>
<td>PETROLEUM PRODUCT STORAGE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>86,000</td>
<td>54,000</td>
</tr>
<tr>
<td>Mining</td>
<td>14,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Construction</td>
<td>42,000</td>
<td>21,000</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>75,000</td>
<td>30,000</td>
</tr>
<tr>
<td>Transportation</td>
<td>58,000</td>
<td>25,000</td>
</tr>
<tr>
<td>Communications and Utilities</td>
<td>39,000</td>
<td>19,000</td>
</tr>
<tr>
<td>Wholesale and Retail Trade</td>
<td>136,000</td>
<td>65,000</td>
</tr>
<tr>
<td>Services</td>
<td>54,000</td>
<td>26,000</td>
</tr>
<tr>
<td>Government, Military</td>
<td>49,000</td>
<td>6,000</td>
</tr>
<tr>
<td>Government, Non-Military</td>
<td>98,000</td>
<td>46,000</td>
</tr>
<tr>
<td><strong>TOTAL USTs CONTAINING PETROLEUM</strong></td>
<td><strong>651,000</strong></td>
<td><strong>298,000</strong></td>
</tr>
</tbody>
</table>

Source: Meridian Research Inc., based on material derived from DRI Inc, 1985
2. Owners and Operators in Retail Motor Fuel Marketing. In studying the type of financial responsibility program suitable for UST owners and operators, EPA first concentrated on the retail motor fuel marketing sector, for the following reasons:

(1) Firms in this sector probably own more than 50 percent of all petroleum USTs.

(2) This sector was easy to study because all firms in this sector own USTs; there was thus no need to distinguish UST-owning firms from firms that do not own USTs.

(3) Fire code regulations require that to conduct business in this sector, all UST-owning firms must store petroleum products underground.

(4) Although the UST-owning firms in this sector range from some of the largest corporations in the world to very small firms, the vast majority of firms in this sector are small, with $50,000 or less in assets and an average net worth of $90,000. In general, the smaller a firm, the more difficulty it is likely to have in meeting financial responsibility obligations.

The retail marketing of motor fuels is performed at various types of business outlets, including:

- Gasoline service stations,
- Convenience stores, and
- Other types of facilities, including mannas, car washes, and agricultural cooperatives, for which gasoline sales are not a major source of the income.

Approximately 193,000 retail outlets sell motor fuels. The owners of these outlets range from some of the largest corporations in the United States (e.g., Exxon, Mobil Oil) to very small businesses with no reported payroll. The operators and owners of these facilities are often not the same entity (e.g., the operator may lease the facility from its owner).

Exhibit 2 presents EPA’s estimates of numbers of firms owning and operating retail motor fuel outlets, by firm category. Twenty-seven refineries (vertically integrated oil companies that produce, refine, and market a variety of petroleum products) each own, on average, 1,733 retail motor fuel outlets. Refineries thus own approximately 24 percent of all retail motor fuel outlets. Approximately 42 percent of retail motor fuel outlets are owned by “open dealer” firms (i.e., small businesses that own and operate one retail motor fuel outlet). The remaining 34 percent of retail motor fuel outlets are owned by jobbers, convenience stores, and independent chains. Exhibit 2 also shows that 58,857 retail motor fuel outlets (30 percent of the total number) are owned by refineries, jobbers, and independent chains but are operated by lessees.

<table>
<thead>
<tr>
<th>Category</th>
<th>No. of firms</th>
<th>No. of retail outlets owned and operated</th>
<th>No. of retail outlets owned and leased</th>
<th>Total No. of retail outlets owned</th>
<th>Average No. of retail outlets owned per firm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refiners*</td>
<td>27</td>
<td>9,864</td>
<td>36,817</td>
<td>46,781</td>
<td>1,733</td>
</tr>
<tr>
<td>Jobbers*</td>
<td>8,766</td>
<td>25,333</td>
<td>20,713</td>
<td>46,046</td>
<td>5</td>
</tr>
<tr>
<td>Convenience Stores*</td>
<td>516</td>
<td>14,732</td>
<td>0</td>
<td>14,732</td>
<td>29</td>
</tr>
<tr>
<td>Independent Chains*</td>
<td>125</td>
<td>4,010</td>
<td>1,127</td>
<td>5,137</td>
<td>41</td>
</tr>
<tr>
<td>Open Dealers*</td>
<td>80,304</td>
<td>80,304</td>
<td>0</td>
<td>80,304</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>89,738</td>
<td>134,343</td>
<td>58,657</td>
<td>193,000</td>
<td></td>
</tr>
</tbody>
</table>

* Refiners are large, vertically integrated oil companies owning refineries that produce petroleum products distributed through their wholesale and retail “branded” outlets.
* Jobbers are primarily wholesalers of petroleum products who may also own retail service stations or convenience store outlets.
* Open dealers both own and operate their gasoline marketing operations in many cases, open dealers are former lessees dealers who bought their locations from major oil companies or refiners.


Firms owning retail motor fuel outlets vary tremendously in their financial strength as well as their size. For example, the median refiner firm has over $9 billion in net worth; this type of firm probably can afford very high corrective action costs and third-party liability awards. In contrast, the median open dealer firm, with a net worth of $90,000, will have difficulty affording even the costs of an UST release that does not reach ground water and does not require high corrective action expenditures or compensation of third parties. If this type of firm does not have pollution liability insurance or another financial assurance mechanism, releases from its USTs may cause damage to health and the environment that will not be remedied.

3. Owners and Operators in Other Sectors. Firms in industry sectors other than retail motor fuel marketing store petroleum products in USTs for a variety of purposes, including on-site vehicle refueling and bulk fuel storage (e.g., of motor fuels, heating oil). A preliminary review of California UST notification data suggests that, compared with the retail motor fuel marketing sector, a smaller percentage of USTs in these other sectors are owned by very large publicly held firms. These data also suggest that only a small percentage of UST owners in these other sectors are as small as the open dealer firms in the retail motor fuel marketing sector. Exhibit 3 lists the 10 industrial sectors, other than retail motor fuel marketing, in which USTs containing petroleum are most commonly found.

<table>
<thead>
<tr>
<th>SIC Code</th>
<th>Industry</th>
<th>Number of tanks</th>
</tr>
</thead>
<tbody>
<tr>
<td>5511</td>
<td>Motor vehicle dealers...</td>
<td>38,000</td>
</tr>
<tr>
<td>421</td>
<td>Trucking, local and...</td>
<td>33,000</td>
</tr>
<tr>
<td>15, 16</td>
<td>General contractors...</td>
<td>28,000</td>
</tr>
<tr>
<td>493</td>
<td>Combination utility...</td>
<td>12,000</td>
</tr>
<tr>
<td>3273</td>
<td>Ready-mixed...</td>
<td>8,000</td>
</tr>
<tr>
<td>5191</td>
<td>Farm supplies,...</td>
<td>7,000</td>
</tr>
<tr>
<td>5083</td>
<td>Farm machinery,...</td>
<td>6,000</td>
</tr>
<tr>
<td>7513</td>
<td>Truck rental and...</td>
<td>6,000</td>
</tr>
<tr>
<td>5211</td>
<td>Lumber and other...</td>
<td>6,000</td>
</tr>
<tr>
<td>Total</td>
<td>153,000</td>
<td></td>
</tr>
</tbody>
</table>

Some of the characteristics of the agricultural, government, and industrial owners of USTs in sectors other than retail motor fuel marketing are presented in Exhibit 4 which shows that a large number of agricultural facilities have USTs that are not exempted from Subtitle I jurisdiction under section 9001(1)(A) (i.e., they have a capacity of more than 1,100 gallons). (See the proposed UST technical standards published elsewhere in today's Federal Register, for a discussion of the scope of this exemption.) It also shows that 52,000 local, State, and Federal government facilities have USTs. These government facilities constitute roughly one-sixth of the total number of facilities with USTs in all sectors other than the retail motor fuel marketing sector. Firms in industry sectors other than retail motor fuel marketing own a total of 651,000 USTs at 288,000 facilities.

**EXHIBIT 4.—PETROLEUM USTS IN SECTORS OTHER THAN RETAIL MOTOR FUEL MARKETING**

<table>
<thead>
<tr>
<th>Industry sector</th>
<th>Number of tanks</th>
<th>Number of facilities</th>
<th>Average number of facilities per owner</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farms Owning One UST Facility</td>
<td>74,000</td>
<td>46,000</td>
<td>1.00</td>
</tr>
<tr>
<td>Farms Owning More Than One Facility</td>
<td>12,000</td>
<td>8,000</td>
<td>2.47</td>
</tr>
<tr>
<td>Subtotal, Agriculture</td>
<td>86,000</td>
<td>54,000</td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local</td>
<td>62,000</td>
<td>29,000</td>
<td>38.8</td>
</tr>
<tr>
<td>State</td>
<td>29,000</td>
<td>14,000</td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td>56,000</td>
<td>8,000</td>
<td></td>
</tr>
<tr>
<td>Subtotal, All Government</td>
<td>147,000</td>
<td>52,000</td>
<td></td>
</tr>
<tr>
<td>General Industry (other than retail motor fuel marketing sector):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Privately held firms owning one UST facility</td>
<td>281,000</td>
<td>129,000</td>
<td>1.00</td>
</tr>
<tr>
<td>Privately held firms owning more than one UST facility</td>
<td>48,000</td>
<td>22,000</td>
<td>5.15</td>
</tr>
<tr>
<td>Publicly held firms or their subsidiaries</td>
<td>89,000</td>
<td>41,000</td>
<td></td>
</tr>
<tr>
<td>Subtotal, General Industry</td>
<td>418,000</td>
<td>192,000</td>
<td></td>
</tr>
<tr>
<td>Total, all sectors other than retail motor fuel marketing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>851,000</td>
<td>298,000</td>
<td></td>
</tr>
</tbody>
</table>

1 Includes only USTs with capacities of more than 1,100 gallons. Source: Mendian Research Inc., based on material derived from DRI Inc., 1985.

**III. Section-by-Section Analysis**

**A. Applicability (§ 280.90)**

Today's proposed rule would apply to all owners and operators of underground storage tanks containing petroleum, with certain exceptions and deferrals. If the owner and operator are separate parties, only one party is required to demonstrate financial responsibility.

An underground storage tank is defined in RCRA section 9001(1) as "any one or combination of tanks (including underground pipes connected thereto) which is used to contain an accumulation of regulated substances, and the volume of which (including the volume of the underground pipes connected thereto) is 10 percent or more beneath the surface of the ground." Regulated substances are further defined by section 9001(2) to mean any CERCLA hazardous substance (excluding substances regulated as hazardous wastes under RCRA Subtitle C) and petroleum, which is defined by section 9001(8) to include crude oil or any fraction thereof that is liquid at 60 degrees Fahrenheit and 14.7 pounds per square inch absolute.

Although section 9003(e)(6) requires the Administrator to promulgate financial responsibility requirements for USTs containing petroleum and other regulated substances (i.e., any CERCLA hazardous substance not regulated as a RCRA hazardous waste), today's rule applies only to tanks containing petroleum. The Agency needs to gather additional information before proposing financial responsibility regulations for USTs containing other regulated substances. Additional data are needed on the types of tanks used to store these substances, the likelihood of releases, the magnitude of corrective costs related to releases of these substances, and the magnitude and likelihood of third-party liability claims. EPA plans to publish a separate advance notice of proposed rulemaking that addresses financial responsibility for USTs containing regulated substances not governed by this rule.

Several issues related to the applicability provisions under proposed Subpart I are discussed in more detail below:

1. **Owner or Operator.** The financial responsibility requirements for taking corrective action and compensating third parties set forth in today's proposed regulation would apply to all owners and operators of USTs containing petroleum, with certain exemptions and deferrals. However, if the owner and operator are separate
The Agency chose the option of allowing either the owner or the operator to demonstrate financial responsibility because it increases flexibility for the regulated community, in which a large number of facilities are separately owned and operated, while still providing adequate financial assurance. This approach is consistent with the statutory language of RCRA Subtitle I and the financial responsibility rules developed by EPA under RCRA Subtitle C.

The Agency considered but rejected the option of requiring both owners and operators to demonstrate financial responsibility. Such an approach might provide somewhat greater assurance that the costs of taking corrective action and compensating third parties would be covered in the event that one party failed to provide adequate funds. And because those parties may be separately liable for third-party damages, this option would have ensured that both parties had funds available to cover their respective liabilities. On the other hand, both the owner and operator are responsible for performing corrective action under RCRA Subtitle I and 40 CFR Part 280, Subpart F and, in many cases, both will be liable for third-party damages caused by releases arising from operating an underground tank. In the case of corrective action costs, it is unnecessary for both parties to obtain financial assurance because, if one party demonstrates financial responsibility, the Agency can order that party to undertake corrective action. In the case of third-party liability claims, the Agency expects that in most cases third parties who are both owners and operators of USTs will be able to rely on the owner and operator of the tank to demonstrate financial responsibility.

2. New Tanks. Under § 280.90(b) of the proposed financial responsibility regulations, an owner or operator of a new petroleum UST (defined in § 280.12 of the technical standards as a tank installed after the effective date of the UST regulations) would become subject to the financial responsibility requirements of this Subpart when the tank is put into operation.

3. Tanks Taken Out of Operation. Today’s proposed financial responsibility requirements would apply to tanks taken out of operation prior to the effective date of the UST regulations. Because non-operational tanks are subject to the closure and corrective action requirements under Subparts F and H of the technical standards, the Agency has determined that financial assurance is also necessary to ensure that closure is undertaken properly and quickly. The owners and operators of these tanks will be released from the obligation to demonstrate financial responsibility in the same manner as the owners and operators of other USTs, namely one year after completion of closure, or if corrective action is required, completion of closure and corrective action (see § 280.109).

4. State and Federal Government Entities. Under § 280.90(c) of today’s proposed regulations, State and Federal owners or operators of USTs containing petroleum will not be required to demonstrate financial responsibility for corrective action and third-party liabilities. The Agency recognizes that because Federal and State government entities are permanent and stable institutions, they have the requisite financial strength to cover the costs of taking corrective action and compensating third parties. In addition, these government entities have an incentive to meet corrective action and third-party liability obligations in a timely manner — since one reason they exist is to safeguard health and welfare. For those reasons, the Agency believes that it is not necessary to develop a financial test or other requirements for Federal and State government entities and thus exempts these entities from the financial responsibility requirements. This provision of the proposed regulations is consistent with the RCRA Subtitle C financial responsibility requirements for closure and post-closure care and third-party liability coverage. (See 40 CFR 284.140(c) and 285.140(c).)

The exemption under § 280.90(c) for Federal and State government entities extends to cases in which a tank is owned by a State or Federal government entity and operated by a private party (or operated by a State or Federal government entity while owned privately); that is, the private owner or operator in these cases need not obtain financial assurance. A State or Federal owner may, of course, require the private operator by contractual agreement to obtain insurance or provide other financial assurance. This approach is consistent with the Subtitle C financial responsibility requirements.

The financial responsibility regulations proposed today apply to government entities whose debts and liabilities are not the debts and liabilities of a State or the United States. In this way, the Agency intends to exclude from the classification of State and Federal government entities those entities whose enabling legislation specifies that their debts are not secured by general revenues. An example of the latter entity is an authority established under State or Federal law whose enabling legislation states that the bonds or notes of the authority are not deemed to constitute a debt or obligation of the State or Federal government entity and cannot constitute bonds or notes issued or guaranteed by the State or Federal entity. Such authorities often rely on revenues generated from the project or facility the authority is established to set up (e.g., toll revenues from bridge and tunnel authorities).

5. Exemptions. The definition of underground storage tank in § 9001(1) contains a number of exclusions. (See footnote I to this preamble and § 280.12 of the technical standards for the types and definitions of underground storage tanks that are excluded.) Tanks included in these statutory exclusions are not subject to today’s financial responsibility regulations.

In the technical standards for USTs proposed elsewhere in today’s Federal Register, the Agency is proposing to exempt from the requirements of Part 280 USTs containing hazardous wastes that are listed or identifiable under Subtitle C of the Solid Waste Disposal Act, even if such tank contains Subtitle I regulated substances in addition to the hazardous wastes. This exemption applies to Subpart I by virtue of § 280.10, proposed elsewhere in today’s Federal Register, which excludes these USTs from regulation under all of 40 CFR Part 280.

In addition, proposed Subpart I does not apply to owners or operators of
underground storage tanks containing hazardous substances or a mixture of petroleum and hazardous substances, if the hazardous substances comprise greater than 50 percent of the mixture (§ 280.90(d)). These tanks will be subject to financial responsibility rules that are being developed separately. The Agency is currently developing an advance notice of proposed rulemaking on financial responsibility for USTs containing hazardous substances.  

6. Deferrels. Section 280.90(e) of today’s proposal defers the applicability of financial responsibility requirements for (1) wastewater-treatment tanks, (2) sumps containing petroleum, (3) UST’s containing used oil, (4) underground bulk petroleum storage tanks, (5) tanks containing electrical equipment, (6) tanks containing radioactive wastes, and (7) hydraulic lift tanks. These tanks (and UST’s containing hazardous substances) are deferred from regulation under Section 280.10 of the technical standards proposed elsewhere in today’s Federal Register, except for the corrective action and notification requirements, because EPA has limited information about these tanks, or it is uncertain about the need to regulate them. (See preamble to technical standards for a more detailed discussion of these tanks.) For these reasons EPA believes it is also appropriate to defer consideration of financial responsibility requirements for these tanks. The Agency intends to address the need for financial responsibility requirements for these tanks, and for tanks containing regulated substances not addressed in this rulemaking, in a forthcoming notice of proposed rulemaking. At that time, the Agency will request comments about the extent and nature of leaks from these tanks and the need for financial responsibility requirements for these tanks. EPA welcomes, however, any comments about these or other pertinent issues at this time. The Agency may propose to subject those tanks to financial responsibility requirements similar to those proposed today if, in response to the advance notice of proposed rulemaking, EPA does not receive any data or information indicating the need for different requirements.  

B. Definition of Terms (§ 280.91)  

Today’s proposed rule, in § 280.91, sets forth definitions of terms that either codify definitions provided in RCRA Subtitle I, or introduce terms used specifically in Subpart I of Part 280. Terms such as “operator,” “owner,” “petroleum,” and “release” which are defined in § 280.12 of the proposed UST technical standards rulemaking, apply to all of Part 280, including Subpart I, and therefore, are not defined in § 280.91.  

1. Accidental Release. An “accidental release” is defined in the proposed rule to include any sudden or nonsudden release of petroleum arising from operating an UST that results in a need for corrective action, bodily injury, or property damage, neither expected nor intended by the tank owner or operator. This definition is consistent with the Subtitle C program and conforms to standard insurance industry practice. The term “release” is not defined in Subpart I because it is defined in § 280.12.  

In today’s proposal, the Agency requests comment on whether the rules should be revised to specify exclusions, inclusions, or other contractual terms, conditions, or defenses that are necessary or unacceptable for coverage of third-party claims for bodily injury and property damage.  

3. Controlling Interest. “Controlling interest” is defined as direct ownership of at least 50 percent of the voting stock of another entity. The Agency defines “controlling interest” to clarify that a guarantee is an acceptable mechanism for demonstrating financial assurance if it is provided by a firm that (1) possesses a controlling interest in the owner or operator (e.g., corporate parent), or (2) possesses a controlling interest in a firm that in turn possesses a controlling interest in the owner or operator (e.g., corporate grandparent), or (3) is controlled through stock ownership with a common parent firm that possesses a controlling interest in the owner or operator (e.g., corporate “sibling” or affiliated firm). Under the Subtitle C rules, only a firm directly owning at least 50 percent of the voting stock of the owner or operator can provide a guarantee as an allowable mechanism. Under the Subtitle I proposal, the Agency intends to make the guarantee more widely available to owners or operators by allowing affiliated firms and “grandparent” firms to provide guarantees, as explained below in Section III.F. of this preamble.  

4. Legal Defense Costs. “Legal defense costs” are defined as any expense incurred by an owner or operator or provider of financial assurance in defending against an claim brought to require corrective action or to recover the costs of corrective action, by or on behalf of a third party for bodily injury or property damage caused by an accidental release, or by any person to enforce the terms of a financial assurance mechanism. The Agency has adopted the definition for “legal defense costs” from the Subtitle C regulations, but has broadened the definition to render it more applicable to the Subtitle I context. Sections 264.141(g) and 265.141(g) of Title 40 of the Code of Federal Regulations define legal defense costs to include only expenses incurred by the insurer in defending against third-party claims. The proposed definition is broader, in part, because it applies to mechanisms other than insurance and to corrective action as well as third-party liability claims.
5. Occurrence. The Agency defines "occurrence" as "an accident, including continuous or repeated exposure to conditions, which results in the release of petroleum from an underground storage tank." The definition is consistent with long-standing standard insurance industry practices and the approach taken in the RCRA Subtitle C financial responsibility rules. (See 40 CFR 264.141(g) and 265.141(g).)

6. Property Damage. Because third parties will generally bring liability claims pursuant to State law, the proposed rule defines "property damage" as having the meaning given it by applicable State law; however, this term shall not include those liabilities which, consistent with standard insurance industry practice, are excluded from coverage in liability insurance policies. As noted in the discussion of the definition of "bodily injury," the Agency requests comment on this approach because of a concern about the potential for an unnecessarily narrow scope of coverage.

7. Provider of Financial Assurance. The term "provider of financial assurance" is defined in today's proposal to cover all entities that provide financial assurance to an owner or operator of a petroleum UST: guarantors, indemnitors, insurers, risk retention groups, sureties, issuers of letters of credit, providers of State-required mechanisms, and States that have established a State fund or other State assurance. It does not include an owner or operator using a financial test for self-insurance. The term is used as a matter of convenience to avoid repetitive listings of all entities that act as providers of financial assurance and which would be subject to the same Subpart I provisions.

Providers of financial assurance are subject to the direct action and liability limits for guarantors under RCRA section 9003(d) (2) and (3). The term "guarantor" is defined in section 9003(d)(4) as any person, other than the owner or operator, who provides evidence of financial responsibility for an owner or operator under this subsection. In other words, the term "guarantor" in the statute is equivalent to the phrase "provider of financial assurance" in the rules.

Section 9003(d)(2) of RCRA Subtitle I provides that: "in any case where an owner or operator is in bankruptcy, reorganization, or other arrangement pursuant to the Federal Bankruptcy Code or where jurisdiction in any State court or the Federal courts cannot be obtained over an owner or operator likely to be solvent at the time of judgment, any claim arising from conduct for which evidence of financial assurance must be provided may be asserted directly against the guarantor providing such evidence of financial responsibility." If such direct action is taken against a provider of financial assurance, the provider is entitled to invoke all rights and defenses which would have been available to the owner or operator if any action had been brought against the owner or operator by the claimant and which would have been available to the guarantor if an action had been brought against the guarantor by the owner or operator.

Section 9003(d)(3) of RCRA also provides that the total liability of the guarantor shall be limited to the aggregate amount which the guarantor has, provided as evidence of financial responsibility to the owner or operator. Section 9003 (d)(3) provides: "Nothing in this subsection shall be construed to limit any other State or Federal statutory, contractual or common law liability of a guarantor to its owner or operator including, but not limited to, the liability of such guarantor for bad faith either in negotiating or in failing to negotiate the settlement of any claim. Nothing in this subsection shall be construed to diminish the liability of any person under section 107 or 111 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 or any other applicable State law."

8. Substantial Business Relationship. "Substantial business relationship" is defined to mean that extent of a business relationship necessary under applicable State law to make a guarantee or indemnity contract issued incident to that relationship valid and enforceable. A guarantee or indemnity contract is issued "incident to" that relationship if it arises from the need to exist on existing economic transactions between the guarantor or indemnitor and the owner or operator. This definition is intended to allow guarantees and indemnity contracts issued by firms, such as petroleum wholesalers and suppliers to unrelated owners and operators, to be used as assurance mechanisms. These categories of mechanisms must be certified as valid and enforceable by the applicable State's Attorney General certified as valid and enforceable by the applicable State law.

9. Tangible Net Worth. "Tangible net worth" is defined as the value of assets that remain after deducting the amount of liabilities and intangible assets, such as goodwill and rights to patents or royalties. As used in this definition, the term "assets" means all existing and all probable future economic benefits obtained or controlled by a particular entity as a result of past transactions. The Agency provides this definition to clarify that, according to generally accepted accounting principles, probable future economic benefits that are expected by a particular entity as a result of transactions not yet entered into are not considered "assets" and, therefore, are not included in the definition of "tangible net worth." In defining "tangible net worth," the Agency does not intend to limit the meaning of "tangible net worth" in a way that conflicts with generally accepted accounting principles or with applicable State law.

C. Amount and Scope of Required Coverage (§ 280.52)

The rule proposed today requires that all owners or operators of USTs containing petroleum demonstrate evidence of financial responsibility in the amount of $1 million per occurrence to cover corrective action and third-party compensation costs for accidental releases from their tanks. In addition, the Agency has established requirements for aggregate levels of coverage, based on the number of USTs to be covered by any financial instrument. The rationale for the amount and scope of required coverage is discussed below, as it pertains to the following topics:

1. Per-Occurrence Amount.
2. Aggregate Amounts.
3. Apportionment of Costs.

1. Per-Occurrence Amount. Section 9000 (d)(5)(A) of RCRA Subtitle I indicates that EPA must establish a minimum amount of coverage of not less than $1 million per occurrence for petroleum USTs at facilities engaged in petroleum production, refining, or marketing. Section 205 of the Conference Report accompanying SARA confirms this interpretation. "The Administrator cannot set a minimum financial responsibility requirement of less than $1 million for tanks which are engaged in petroleum production, refining, or marketing." (House Report 99-953, 99th Congress, 2nd Session, p. 284.) The Administrator may require lower coverage amounts for petroleum USTs located at facilities that are not engaged in petroleum production, refining, or marketing and that are not used to handle substantial quantities of petroleum. Section 280.52(a) of today's rule proposes the $1 million amount as
the minimum amount of required coverage for all owners or operators of petroleum USTs.

EPA believes that the $1 million per-occurrence level suggested by Congress is sufficient to cover corrective action and third-party compensation costs arising from UST releases in the vast majority of cases. At the same time, the Agency recognizes that, on infrequent occasions, these costs will exceed the $1 million level. Congress recognized that the required coverage might not be entirely adequate in all cases and in § 9003(h)(2)(C) of Subtitle I, made provision for the use of the Leaking Underground Storage Tank Trust Fund to pay corrective action costs in instances where these costs exceed the level of financial responsibility required by EPA regulations. EPA has determined that coverage of $1 million per-occurrence would be adequate to cover the combined costs of corrective action and third-party liability in 99 percent of all occurrences.

The Agency relied on three data sources to confirm the suitability of Congress' suggested $1 million level of coverage: (1) EPA's estimate of corrective action costs; (2) the claims experience data of the two largest insurers of petroleum-containing USTs; and (3) an EPA-sponsored study entitled "Tort Liability Due to Releases From Underground Storage Tanks at Service Stations." In the two latter data sources, costs for corrective action and third-party liability are not distinguished. According to EPA's estimate of corrective action costs, the costs of cleaning up a dispersed plume that reaches ground water will seldom exceed $281,000. Thus the Agency is satisfied that when corrective action costs alone are involved, a $1 million per-occurrence level of coverage almost always will be sufficient to cover these costs.

The largest insurer of USTs owned by firms in the retail motor fuel marketing sector has not paid more than $1 million on a pollution liability claim (i.e., a claim on a pollution liability policy covering both corrective action and third-party compensation) in more than three years of operation and has had only one UST claim during the period in the $500,000 to $1 million range. During this period, this insurer has paid more than $200 claims, and approximately two to four percent of claims involved third-party liability. Similarly, the other major insurer of USTs in this sector has not paid a claim for more than $1 million. During this time period, both of these companies had issued many policies with per-occurrence limits in excess of $1 million. The average UST claim paid by these companies in 1985 for corrective action and third-party compensation was reportedly between $50,000 and $60,000; in recent months, the value of the average UST claim has risen to $125,000. Thus, past insurance claims experience suggests that a $1 million level of per-occurrence coverage will be sufficient to cover both the costs of corrective action and third-party compensation.

The third source of information used to determine the per-occurrence level, the EPA-sponsored study mentioned above, was concerned only with UST claims that involved third-party liability. In general, the more serious (in terms of financial responsibility required by EPA regulations) a release, the more likely it is to involve third-party liability. This study found that 23 percent of these claims involved awards of more than $1 million; however, the 96-98 percent of UST release incidents that do not result in third-party damage claims were excluded from consideration. EPA believes that because of the methodology used in this study to obtain information about claims (i.e., reviewing decisions in cases reaching the appellate level and searching product liability, environmental, and trial law publications for information on ongoing recent lower court cases), the study probably overrepresented the percentage of third-party liability claims for which awards of more than $1 million were granted. This methodology would tend to overrepresent the costs of the most serious UST liability cases because the majority of cases that were easily settled with insurers never reached the appellate court level or were never cited in legal publications. Even if this is so, if, as current insurance claims data indicate, not more than four percent of all UST claims involve third-party damages, and 23 percent of claims involving third-party damages cost over $1 million, then the maximum combined incidence of corrective action and third-party liability claims over $1 million should be 0.92 percent.

Examination of each of the three data sources on corrective action and third-party compensation costs thus allows the Agency to conclude that a $1 million per-occurrence limit is adequate to cover these combined costs 99 percent of the time. EPA's estimates of corrective action costs show that $1 million will cover virtually all releases involving only corrective action. Insurance claims experience demonstrates that, to date, no UST claim involving both corrective action costs and third-party liability awards has exceeded $1 million. The EPA-sponsored study of tort claims, which examines only claims involving third-party liability awards, does show that more than 1 percent of the claims examined exceeded $1 million; however, claims including third-party liability costs occur infrequently (i.e., less than 4 percent of the time) it can be concluded that $1 million is sufficient to cover 99 percent of all UST releases (i.e., all corrective-action-only claims and 99 percent of all other claims filed).

A per-occurrence level designed solely to cover 99 percent of the releases involving third-party liability awards (instead of corrective action and/or third-party liability awards) would have to be set at a level greater than $10 million.

The Agency further believes that setting a per-occurrence level high enough to cover both corrective action and liability claims for more than 99 percent of all UST release incidents (i.e., a per-occurrence level of $1 million) is sufficient, appropriate, and equitable with regard to both small and large firms. The reasons underlying this belief include the following:

- A per-occurrence level high enough to cover fully the costs of the most serious and uncommon release incidents (e.g., incidents costing $10 million or more) would be unduly burdensome for the many small firms that are having difficulty obtaining pollution liability insurance even at a low per-occurrence level.
- A lower per-occurrence level is not appropriate for small firms because the threat to human health and the environment posed by releases from USTs is the same, in terms of severity, regardless of whether the leaking tank is owned by a small firm or a large firm.
- Large firms that can afford higher levels of per-occurrence coverage are not required to have higher levels because, as discussed above, $1 million should be sufficient to cover all corrective action and third-party liability costs in 99 percent of cases.

Factors such as the age of the tank, the material of which it is made, and the presence of a secondary containment system were not used to establish classes or categories of tanks for the purpose of setting a per-occurrence level. Although such factors do affect a tank's propensity to leak, there is no evidence to suggest that any of these factors affects the costs related to a release. The setting of an appropriate per-occurrence level depends on the costs of individual releases rather than on the probability that a release will occur, and there is therefore no reason...
why the factors mentioned above should have a bearing on the per-occurrence level of coverage required. For example, a release from a 1-year-old tank can be just as expensive to address as a release from a 20-year-old tank.

A release incidence survey sponsored by EPA suggests that locational factors (e.g., proximity to ground water) may affect the size and costs of corrective action and liability related to releases. However, the factors mentioned above should have a bearing on the per-occurrence level of coverage required. United States might be difficult to implement for purposes of financial assurance. Furthermore, because the overwhelming majority of release incidents, regardless of location, incurred costs amounting to less than $1 million, taking such a classification scheme into consideration when setting levels would appear to add complexity without increasing the amount of protection provided. However, individual States are not precluded from using locational factors to set higher per-occurrence levels when that may be appropriate (e.g., for tanks located near important drinking water supplies).

EPA requests comments with regard to several issues raised in this section. First, in setting a per-occurrence limit, is the Agency's approach (i.e., to assure that in 99 out of 100 release incidents, corrective action and third-party liability costs will be covered) a reasonable approach? Second, are there good reasons for varying the per-occurrence level of coverage by size of tanks, throughput of tanks, or any other variable that might affect the level of cleanup costs for one occurrence? Third, to what extent, if any, should the Agency consider the economic impact on classes or categories of owners or operators in the setting of a required per-occurrence level of coverage?

2. Aggregate Amounts. Section 9003(d)(5)(A) of Subtitle I grants the Administrator discretion to set "an appropriate aggregate requirement" for the coverage of USTs containing petroleum. By aggregate amount, EPA means the total costs within a given year for all releases from petroleum-containing USTs covered by a single financial mechanism. (For the purposes of setting aggregate levels, any reference to tanks means only single containment units and does not include combinations of these units. This definition applies only with regard to required aggregate levels of coverage. See § 280.52(c).) If an owner or operator uses different mechanisms to cover different USTs, the appropriate annual aggregate is based on the number of tanks covered by each separate mechanism or combination of mechanisms.

For firms with 13 or more tanks, the Agency proposes, in § 280.92(b), levels of aggregate coverage that were derived from analyses of the various levels of costs for corrective action and third-party compensation associated with the average probabilities of releases for all bare steel tanks (i.e., steel USTs not protected from corrosion). EPA's analysis is based on a probability of 11.8 percent that a tank would experience a release. This probability is considerably higher than that based on insurance claims experience, tests of tanks by Chevron and Texaco, or regulatory experience in Santa Clara, California; Dade County, Florida; or the State of Maryland. The probabilities and costs used in the Agency's statistical analysis to develop the aggregate level requirements being proposed are described in more detail in the supporting document, which is available in the docket for this rulemaking.

The aggregate coverage is set at levels sufficiently high that corrective action and third-party liability costs will exceed aggregate levels of coverage required under Subpart I no more than one percent of the time. As stated earlier, the amount of aggregate coverage that a firm is required to carry depends on the number of tanks for which it is providing financial assurance.

However, EPA decided to depart from this one percent safety criterion for the $1 million aggregate level bracket (the lowest level of required coverage) due to the potentially adverse economic impact that strict adherence to such a criterion could have on small businesses. Although the analyses showed that $1 million was adequate to cover 1 to 5 tanks with a 99 percent probability that this aggregate level would not be exceeded, the Agency has expanded this bracket to allow coverage for 1 to 12 tanks. In doing so, 99 percent of all firms within the retail motor fuel marketing sector that conform to the Small Business Administration's definition of a "small business" (i.e., a firm with less than $4.6 million in annual sales) are required to carry $1 million aggregate coverage. The firms in this sector most likely to be affected by the lowered aggregate requirements are small rural jobbers, currently without insurance, who could be subject to significant economic impacts if forced to obtain coverage at the $2 million aggregate level. With a $1 million aggregate, the economic impact on these firms will be minimal (see Regulatory Impact Analysis, Chapter 5). The savings in insurance premiums for these firms will be $2.8 million per year, while the increase in corrective action and third-party compensation costs that will not be met by owners or operators (or covered by their financial mechanisms) as a result of this bracket expansion will be $145,000 per year. EPA estimates that this lowered aggregate requirement could save up to $15 million annually in premium costs for those businesses in all sectors having 8 to 12 facilities.

For the purpose of determining appropriate aggregate levels of coverage, EPA has set a goal of ensuring that corrective action and third-party liability costs do not exceed the established aggregate levels more than one percent of the time. This means that out of 100 UST-owning firms having insurance instruments that provide aggregate coverage that conforms to levels set by EPA, no more than one of these firms should incur corrective action and third-party liability costs exceeding this aggregate level in any given year. EPA's analysis considered the full range of situations that firms owning or operating USTs might face, including the possibility that none of a firm's USTs would experience releases as well as the possibility that all of a firm's USTs would experience releases serious enough to involve third-party liability costs. A brief discussion of the Agency's development of appropriate aggregate requirements follows; a detailed discussion of the assumptions, methodology, and results of the analysis may be found in Chapter 3 of the supporting document.

The analysis used to determine appropriate aggregate levels reflects a statistical principle known as the Law of Large Numbers, which states that, for statistically independent events, the greater the number of events, the greater the likelihood that the outcome of these events will be close to the expected value (the average outcome per event times the number of events). Accordingly, if UST releases are assumed to be statistically independent events (i.e., a release at one UST does not increase the probability of a release at another UST owned by the same firm), as the number of covered USTs increases, the potential for release-related costs to exceed the aggregate level of coverage increases as well, although not proportionately. In other words, the aggregates necessary to provide a given level of assurance will be a decreasing multiple of the coverage for one tank.

EPA recognizes that, in some cases, UST releases will not be completely independent statistically. For example,
faulty management practices may increase the probability that all of a firm's USTs may experience releases. In such instances, a release from one UST will not cause a release from another UST, but releases from tanks owned by the same firm may be correlated to some degree. However, neither the factors contributing to such a correlation nor the degree of correlation can be predicted, and the Agency has therefore assumed that releases from USTs owned or operated by the same firm are statistically independent. If the Agency did not use this assumption, the annual aggregate levels of coverage required would have to be considerably higher in order to ensure that aggregate levels of coverage would not be exceeded by annual corrective action and third-party liability costs more than one percent of the time. The Agency requests comment on the assumption in calculating appropriate levels of aggregate coverage.

In today's notice, EPA is proposing in § 280.92(b) the following aggregate levels:

<table>
<thead>
<tr>
<th>Number of Tanks</th>
<th>Annual Aggregate Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-12 tanks</td>
<td>$1,000,000 annual aggregate coverage</td>
</tr>
<tr>
<td>13-60 tanks</td>
<td>$2,000,000 annual aggregate coverage</td>
</tr>
<tr>
<td>61-140 tanks</td>
<td>$3,000,000 annual aggregate coverage</td>
</tr>
<tr>
<td>141-250 tanks</td>
<td>$4,000,000 annual aggregate coverage</td>
</tr>
<tr>
<td>251-340 tanks</td>
<td>$5,000,000 annual aggregate coverage</td>
</tr>
<tr>
<td>341 or more</td>
<td>$6,000,000 annual aggregate coverage</td>
</tr>
</tbody>
</table>

EPA considered several alternatives in setting annual aggregates. For example, the Agency considered the possibility of setting the same aggregate level for all firms. This alternative was rejected because there would be insufficient coverage for owners or operators with numerous tanks or excessive coverage for owners or operators of few tanks.

EPA also considered the possibility of developing aggregate levels based on the goal of ensuring that firms would not incur corrective action and third-party compensation costs exceeding aggregate levels more than one percent of the time their UST's experienced releases (as opposed to one percent of the time, which includes years in which firms experience no UST releases). If the Agency had developed aggregate levels based on this objective, all firms with 2-60 USTs would need financial assurance at the $2 million aggregate level. The number of tanks in all other aggregate level brackets would remain unchanged. The Agency rejected this approach because of the burden it would have placed on small firms.

Another approach considered was to require no aggregate greater than that provided in currently existing insurance policies. In the retail motor fuel marketing sector, the highest aggregate available during 1988 for firms other than large refiners was $4 million. EPA decided not to limit the aggregate in this way because this would not be appropriate in view of the Agency's primary goal of protecting public health and the environment. EPA nevertheless recognizes that existing insurance capacity could present a problem for many firms who own large numbers of tanks. Although some firms requiring aggregate limits in excess of $4 million will be able to supplement or replace existing insurance coverage with other mechanisms (e.g., financial test of self-insurance, surety bonds, letters of credit), other firms required to obtain such coverage may not possess sufficient resources and thus may be unable to meet the requirements unless greater insurance capacity is made available or they obtain a suspension of enforcement, as discussed below.

EPA also considered varying the aggregate according to factors such as type of tank, its age, and/or the integrity of its construction. For example, cathodically protected tanks, double-walled tanks, and fiberglass tanks have fewer releases than other types of tanks; thus, costs incurred by firms owning these types of tanks are less likely to exceed any given aggregate. However, the problem of how to set appropriate aggregate levels for firms owning many different types of tanks of various ages and at many different locations, is extremely complex. Insurers are likely to consider such factors in their underwriting procedures; if they charge lower premium amounts for safer tanks, this may create an incentive for owners to install safer tanks and upgrade existing tanks.

EPA rejected varying the level of aggregate coverage required according to the type or age of tanks because of the complications involved in producing inventories of tanks and formulas for aggregating different proportions of bare steel and other types of tanks. For these reasons, the Agency used an average set of probabilities for bare steel tanks in its analysis of aggregate levels. EPA requests comments on the proposed approach to setting aggregate levels of coverage, the approaches considered but rejected, and suggestions for other approaches.

3. Apportionment of Costs. The Agency is proposing not to apportion financial assurance coverage between corrective action and third-party compensation because it is not possible to estimate or predict what relative amounts of funds would be needed for these two types of costs before the occurrence of an actual release. Such an approach permits flexibility: the coverage may be used up to the $1 million per-occurrence limit or the appropriate annual aggregate level for either corrective action or third-party liability costs. In addition, it may often be difficult to make a distinction between these two types of costs in cases involving third-party compensation for property damage. For example, the costs of cleaning up release effects that have occurred outside the boundaries of an owner's facility generally are considered corrective action costs. However, if an owner is sued by a third party for property damage, these expenses also could be considered third-party compensation costs.

Furthermore, neither the statute nor the legislative history indicates Congressional intent to specifically apportion the financial assurance coverage between corrective action and third-party compensation. The Agency requests comments on the issue of apportioning costs.

4. Level of Coverage Under Separate Mechanisms. The Agency is proposing that owners or operators who use separate mechanisms to provide coverage for corrective action and third-party compensation must have the minimum $1 million per-occurrence coverage and the appropriate aggregate coverage (based on number of tanks) for each type of cost.

EPA has taken this approach for the same reason that it is decided not to apportion financial assurance coverage between corrective action and compensation of third parties. Before an UST release occurs, it is difficult to predict what portion of coverage will be needed to satisfy corrective action costs and what portion of coverage will be needed to satisfy third-party compensation claims. The analyses performed by EPA to support the $1 million per-occurrence level and the aggregate levels did not consider corrective action costs and third-party liability costs separately because the classification of costs as corrective action costs or third-party liability costs sometimes depends on the circumstances. For example, if a corrective action order specifies that alternative water supplies be provided to residents of a community—it is a corrective action cost. If, however,
alternative water supplies must be provided as a result of a suit brought by third parties, it could be a third-party liability cost. Therefore, the only way the Agency can be sure that owners and operators will be able to cover the costs of UST releases in 99 percent of all cases is if they are required to carry the minimum per-occurrence and aggregate coverage for each separate assurance mechanism.

If separate mechanisms are used to cover third-party liability claims arising from sudden and from nonsudden accidental releases, coverage under each mechanism must be at the $1 million per-occurrence level at a minimum. [The aggregate coverage required under each mechanism would vary based on the number of covered tanks owned or operated.] Given the decision not to apportion coverage, having a separate mechanism for sudden and for nonsudden accidental releases would not provide more than the required level of coverage, because sudden and nonsudden accidental releases are mutually exclusive, and therefore each release would trigger only one type of coverage.

This proposal to allow separate mechanisms for separate costs will provide flexibility by allowing the regulated community to use mechanisms that are available to cover only either corrective action or third-party compensation. For example, some environmental impairment liability insurance policies may not provide coverage for "on-site cleanup." Similarly, some State funds may cover corrective action but exclude coverage for compensation of third parties. Allowing owners or operators to use separate financial mechanisms for corrective action and for compensation of third parties would permit owners or operators to use any appropriate and available mechanisms to cover their respective corrective action and third-party compensation obligations. EPA solicits comments on this approach.

D. Allowable Mechanisms and Combinations of Mechanisms (§ 280.93)

1. Allowable Mechanisms. The proposed rule requires owners or operators of USTs containing petroleum to provide financial assurance for taking corrective action and compensating third parties for bodily injury and property damage caused by accidental releases. The Agency is proposing, in § 280.93, to allow UST owners or operators to demonstrate financial responsibility for these types of costs through the use of any one of the following mechanisms: financial test of self-insurance, guarantee, indemnity contract, insurance, risk retention group coverage, surety bond, letter of credit, State-required mechanisms, or State fund or other State assumption of responsibility.

The set of allowable mechanisms differs in several ways from the set of mechanisms for closure, post-closure care, and liability coverage under RCRA Subtitle C. First, RCRA Subtitle C does not allow indemnity contracts. For today's proposal, EPA considers indemnity contracts to be appropriate because they can provide adequate financial assurance while broadening the scope of third-party coverage for the owner or operator. Indemnity contracts are discussed in Section III.C of this preamble.

Second, unlike today's proposal, RCRA Subtitle C financial responsibility regulations for closure, post-closure care, and corrective action include a trust fund as a financial assurance mechanism. This mechanism was considered to be appropriate for owners or operators setting aside funds to cover the non-contingent costs of closure and post-closure care. However, this mechanism is not considered to be appropriate for UST owners or operators, as discussed in Part 3 of this Section.

Other differences between the allowable mechanisms under the Subtitle C and proposed Subtitle I rules are discussed in Section IV of this preamble.

The Agency is proposing a broader set of mechanisms for UST owners and operators primarily because the universe of UST owners or operators is much larger than the Subtitle C universe. Thus, the Agency is providing a wider range of alternatives to meet the financial assurance needs of owners or operators, even if some alternatives are not widely available or widely used.

The Agency nevertheless acknowledges that allowing this broader set of mechanisms may raise certain legal and technical issues. First, several mechanisms that rely on parties other than the owner or operator to provide funds for third-party liability claims (i.e., guarantee, indemnity contract, surety bond, and letter of credit) will be provided by firms that agree to reimburse EPA for claims but that do not investigate or assess the validity of claims before payment. As these instruments are conventionally drafted, EPA, as the beneficiary of these instruments, would be the party primarily responsible for judging the validity and priority of claims. The Agency has sought, to the maximum extent possible, to draft instruments and procedures for distributing funds (described in Section III.R of this preamble) that would not require either the Agency or the provider of the instrument to decide on the validity and priority of third-party claims.

Second, provision of coverage for third-party liability claims by means of a guarantee, indemnity contract, or surety bond technically might fall under broad definitions of "the business of insurance" in particular State insurance laws. The Agency has sought in two ways to avoid having these mechanisms raise questions of State insurance regulation.

First, the parties allowed to provide guarantees have been limited to related firms based on a "controlling interest" and to unrelated firms engaged in a "substantial business relationship" with the owner or operator. (The definitions of "controlling interest" and "substantial business relationship" are presented in Section III.B.) Moreover, the parties allowed to provide indemnity contracts have been limited to firms engaged in a substantial business relationship with the owner or operator. The reason for this difference between the guarantee and the indemnity contract is explained in Section III.G.) The Agency has set limits on who may provide these instruments in order to minimize problems with State insurance laws, which might otherwise regulate their issuance. However, many State insurance laws exempt from their jurisdiction firms that issue guarantees, indemnity contracts, or surety bonds, if the firms issue those instruments as actions "incidental to their legitimate business or activity." By specifying that only affiliated firms or firms with substantial business relationships may issue guarantees or indemnity contracts, the Agency expects to ensure that they will be exempt from insurance regulation. The Agency also believes that a similar restriction for providers of surety bonds is unnecessary because sureties are often regulated by State insurance commissions; thus, sureties may already have qualified to participate in "the business of insurance." The Agency, however, is soliciting comments on the following questions: Which States allow exemptions from their insurance regulations for guarantees, indemnities, and sureties incidental to legitimate business activities? What degree of affiliation and what types of business activities have been found to satisfy the requirement? In part, the Agency expects that a petroleum supplier could qualify to issue a guarantee or indemnity to a petroleum dealer under
this exemption. Have any States sought to regulate any such current contracts? Second, in order to provide further assurance that the guarantee, indemnity contract, or surety bond will be valid and enforceable instruments, § 280.03 of the proposed rule requires that before those instruments may be used to establish financial responsibility, the Attorney General(s) of the States in which the petroleum underground storage tanks are located must have submitted a written statement to EPA that an instrument executed as required by the proposed rule is a legally valid and enforceable obligation in that State.

By legally valid and enforceable, the Agency means that (1) the instrument satisfies the necessary contractual formalities of the State's laws; (2) it satisfies the requirements for exclusion from regulation under the State's insurance laws; and (3) the procedures for drawing on the instrument found in §280.108 of the proposed rule will be effective in the State.

The Agency requests comments and suggestions concerning the proposed range of allowable mechanisms.

2. Allowable Combinations of Mechanisms. The Agency is also proposing to allow UST owners or operators to demonstrate financial responsibility through the combination of financial assurance mechanisms. The Agency is allowing combinations of any of the proposed mechanisms to provide coverage for corrective action costs and/or all third-party compensation costs.

The proposed set of allowable combinations differs in two important ways from the set of allowable combinations used for closure, post-closure care, and liability coverage under RCRA Subtitle C.

First, the Subtitle C financial responsibility rules for closure and post-closure care expressly prohibit the combination of the financial test or guarantee with any other mechanism.

The Subtitle C requirements for liability coverage, however, allow the combination of the financial test or guarantee with insurance, as a means of covering the deductible portion of an insurance policy. In allowing a financial test or a guarantee to be combined with other allowable mechanisms, the proposed rule adopts the general approach used for Subtitle C liability coverage: it allows the owner or operator to use his own financial strength to cover some costs and another financial assurance mechanism to cover the remaining costs.

Second, Subtitle C rules for closure, post-closure care, and liability coverage expressly prohibit the combination of the financial test and the guarantee. Under Subtitle C, a guarantor is required to be the parent corporation of the owner or operator. Therefore, the Agency prohibited, under Subtitle C, a financial test-guarantee combination because financial tests for a subsidiary owner or operator and a parent guarantor usually would be based on consolidated financial statements and, thereby, would double-count the same assets and liabilities. Under the proposed rule, a guarantor is not required to be the parent corporation of the owner or operator. The proposal does not require a parent-subsidiary relationship because owners or operators of USTs often will have an important business relationship with larger, integrated petroleum companies that may not be parent corporations but still may have an economic interest in providing a guarantee. Therefore, the Agency is allowing the financial test and guarantee to be combined if the financial statements of the owner or operator are not consolidated with the financial statements of the guarantor, including a corporate parent guarantor.

This provision avoids the double-counting problem of consolidated statements discussed above and gives the owner or operator the opportunity to combine the financial test with a non-parent guarantee. To use such a combination, a parent guarantor and its subsidiary owner or operator may have to obtain special unconsolidated financial statements.

The Agency considered allowing only the following mechanisms to be combined: (1) The financial test of self-insurance, (2) State fund or other State assumption of responsibility, (3) insurance, (4) risk retention group coverage, and (5) any one of the following mechanisms: guarantee, indemnity contract, surety bond, letter of credit, or some State-required mechanisms. This approach allows all possible combinations of mechanisms except combinations including more than one of the mechanisms listed in (5)—i.e., guarantee, indemnity contract, surety bond, letter of credit, and some State-required mechanisms—all of which require the use of a standby trust fund. For example, under this approach an owner or operator would be able to combine the financial test with two insurance policies and one mechanism listed in (5); however, the owner or operator could not combine the financial test and two insurance policies with two of the mechanisms listed in (5).

This approach was considered because the mechanisms in item (5) require the use of standby trust funds. If these mechanisms are used in combination, it may be difficult to determine and justify which instrument should be drawn upon first in the event of a claim. For example, if a claim for $100,000 arises and a letter of credit and a surety bond each assure $500,000 in costs, the providers of the instruments may disagree over who has to pay on the claim. Each provider knows that there is a possibility that no more claims will arise, so each has an incentive to have the other provider pay. The Agency therefore considered avoiding such situations by disallowing most combinations of these instruments.

However, the Agency decided against this approach because the allocation problem can be remedied through the use of a simple formula. In allocating required claims among financial assurance instruments, the Agency may draw on each mechanism in proportion to the total amount of coverage it provides. For example, a guarantee may be used to provide $500,000 of per-occurrence coverage (80 percent of $1 million) and a surety bond used to provide the remaining 20 percent of coverage, or $200,000. Then if costs of $200,000 are incurred, EPA may draw $160,000 (80 percent of $200,000) from the guarantee and $40,000 (20 percent of $200,000) from the surety bond.

The Agency therefore considers allowing a contractual arrangement whereby a single mechanism is pledged to cover the first claims up to a certain amount. The Agency considers allowing the owner or operator to combine mechanisms and EPA to draw on them in an equitable manner.

The Agency requests comments and suggestions regarding the range of allowable combinations of mechanisms.

3. Allowable Mechanisms and Types of Costs Covered. Today's proposal allows a broad range of mechanisms and combinations of mechanisms for providing financial assurance for USTs containing petroleum. Each mechanism or allowable combination of mechanisms may be used to provide coverage for corrective action costs and/or third-party compensation for both sudden and nonsudden accidental releases. In addition, each mechanism or combination of mechanisms may provide coverage for a subset group of tanks.

Therefore, the proposal for allowable mechanisms and combinations of mechanisms provides the following:

- Separate mechanisms may be used to provide financial assurance for corrective action and for third-party compensation for sudden and nonsudden accidental releases. For example, an owner or operator may...
provide assurance for corrective action through the use of a letter of credit and for third-party compensation for accidental releases through an insurance policy.

* Combinations of mechanisms may be used to provide financial assurance separately for corrective action and third-party compensation. For example, an owner or operator may provide assurance for corrective action through a combination of a letter of credit and the financial test and for third-party compensation through a surety bond and insurance policy.

Separate mechanisms or combinations of mechanisms may be used to provide financial assurance separately for different groups of tanks. For example, an owner of 100 tanks may cover 50 tanks with one mechanism or combination and the other 50 tanks with another mechanism or combination. (The aggregate level of coverage for each group of tanks is determined by the number of tanks covered by a mechanism or combination of mechanisms.)

For each type of cost covered by a mechanism or combination of mechanisms, each mechanism or combination of mechanisms must be at the full amount of required coverage. (See discussion in Section III.C.3.) Moreover, for each group of tanks covered by a mechanism or combination of mechanisms, each mechanism or combination of mechanisms must be at the full amount of required coverage.

In some cases, an owner or operator may be able to obtain a mechanism that covers third-party compensation for damages caused only by sudden accidental releases or for damages caused only by nonsudden accidental releases. These cases will probably arise for insurance policies, because insurance companies often make the distinction between sudden and nonsudden accidents. Therefore, the Agency wants to allow owners or operators to obtain separate insurance policies for sudden and nonsudden accidental releases, thus enhancing the availability of insurance as a financial assurance mechanism.

4. Mechanisms Considered But Not Proposed. a. Trust Funds. The Agency considered allowing the trust fund as a financial assurance mechanism for UST owners or operators, but has decided not to include the trust fund mechanism in this proposed rule. The Agency considered trust funds for the UST program because other Federal financial responsibility programs allow the use of trust funds to provide required financial assurance. For example, trust funds can be used to satisfy the financial assurance obligations of the owners or operators of hazardous waste management facilities under the RCRA Subtitle C closure and post-closure care financial responsibility regulations. However, the Agency believes that the trust fund is not an appropriate mechanism for UST financial assurance because the cost of funding a trust cannot be adequately balanced with the assurance a trust fund can provide.

The level of coverage a trust fund can provide for corrective action or third-party liability claims resulting from a petroleum UST release is dependent on the length of time the trust may be gradually funded and the resulting amount of the annual deposit. If the trust is required to become fully funded quickly, the short pay-in period would result in payments that are unaffordable for those owners or operators most likely to use the trust fund (i.e., those owners or operators unable to pass the financial test and/or afford coverage through another mechanism). In addition to its high costs, the trust fund provides limited financial assurance in the beginning of any pay-in period. In the event of a release early in the pay-in period, the funds available for corrective action and/or third-party liability might be inadequate to cover all of the expenses. Because affordable deposits often provide inadequate assurance, the trust fund is not proposed as a financial assurance mechanism for UST owners or operators.

However, the Agency also considered and rejected the use of trust funds in combination with another mechanism. For instance, a trust fund could be used in combination with an insurance policy to provide coverage of the insurance policy deductible and thereby lower insurance premiums. In such a case, the trust fund may prove to be more costly than paying the additional premium for first dollar coverage because (1) the owner or operator would have to set aside the full amount of the insurance policy deductible; (2) the trust fund deposits, unlike the insurance premium, would not be tax deductible; and (3) acceptable insurance policies may include "deductibles," whereby the insurer will pay the deductible amount and recover the cost from the insured (i.e., the insurer is responsible for the deductible amount only if insured is unable to pay). Therefore, the benefit to owners and operators of being able to use the trust fund in combination with another mechanism appears to be negligible, so the Agency decided not to propose trust funds as a mechanism to be used in combination with third-party mechanisms or the financial test. The Agency requests comments on this decision.

b. Security Agreements. The Agency also considered, but decided not to propose, security agreements as allowable financial assurance mechanisms. A security agreement creates a security interest in property that entitles the secured party (i.e., EPA in this case) to compensation equal to the value of the secured property should the owner or operator default on his obligation to take corrective action or compensate third parties. Security agreements are regulated by State laws that stipulate the process required to create a security interest.

The Agency decided not to propose security agreements at this time because it is uncertain whether security agreements would provide adequate assurance. The ability of a security agreement to provide adequate assurance depends on the value and liquidity of the collateral subject to the agreement; whether the administering agency can ensure that the owner or operator satisfies procedural requirements necessary to set up and maintain a security agreement; and whether the administering agency can seize and sell the collateral, if necessary, to obtain the assured funds. The types of collateral most likely to be used by owners or operators, such as goods in inventory, equipment, real property, or a lease, provide a questionable degree of liquidity, and their value can be difficult to determine. Because markets for such firm specific items are not likely to exist, there are not market prices for the items, and buyers would be difficult to find. Simultaneously, assets such as marketable securities are highly liquid and have an explicit market value, yet a firm is highly unlikely to use such assets as collateral, since they then cannot be used to fund a firm's ongoing operations.

Finally, the requirements for financing statements, filing and perfection of the security agreement, renewal of the security agreement, and maintenance of the collateral, differ slightly from State to State. Furthermore, the satisfaction of such procedural requirements for a security agreement is not supervised by the provider of the instrument, and would have to be reviewed periodically by the administering agency. Therefore, EPA has tentatively concluded not to allow security agreements to be used as financial assurance mechanisms.

The Agency solicits comments on allowing security agreements, particularly regarding suggestions of how a security interest might be
structured to provide adequate assurance.

E. Financial Test of Self-Insurance ($§ 28094)

1. Features of Mechanism. The financial test is the instrument by which a firm demonstrates that its resources are adequate to meet its obligations. If a firm can successfully meet the requirements of the financial test of self-insurance being proposed today in § 28094 for the full amount of required coverage, the firm is not required to procure insurance or other financial responsibility mechanisms to demonstrate its ability to fulfill its obligations to perform corrective action or compensate third parties for damages arising from UST releases. The financial test of self-insurance is also used to qualify guarantors and indemnitors to provide guarantees and indemnity agreements to firms that own or operate USTs. (The provisions of the regulations which apply only to those firms using the financial test as guarantors or indemnitors are described in Sections III.E and III.G., respectively.)

The criteria for the financial test of self-insurance were designed to ensure that self-insuring firms, guarantors, and indemnitors that meet these criteria would be able to meet their corrective action and third-party liability obligations. How these firms arrange to pay these obligations is left to these firms to decide.

Under today's proposed rule, the chief financial officer of a firm using a financial test to demonstrate financial responsibility for the USTs it owns or operates, and/or to qualify as a guarantor of another firm's USTs, and/or to qualify as an indemnitor of another firm's USTs is required annually to sign a letter that attests to its ability to provide insurance coverage for a UST-owning or -providing firm. Using required wording as specified in the proposed rule, the letter from the chief financial officer must identify the costs covered by the Subtitle I financial test of self-insurance (corrective action costs and/or compensation of third parties) as well as certain other obligations for which financial tests are being used to demonstrate financial responsibility to EPA (or to an authorized State). It must also list the tanks that are covered and the names and addresses of the facilities where these tanks are located. The information required in the letter is necessary to identify which tanks are being covered by this financial test of self-insurance and to verify whether the owner or operator, guarantor, or indemnitor qualifies for the financial test of self-insurance. In addition, the implementing agency may request an owner or operator, guarantor, or indemnitor to submit at any time updated or additional information concerning financial condition.

The Agency also is considering adding a requirement that an owner or operator, guarantor, or indemnitor execute a binding written guarantee to EPA that the firm will pay the corrective action and third-party liability obligations that it is assuming by means of the financial test. The Agency is thereby seeking to have the highest possible priority as a claimant in a bankruptcy proceeding if the owner or operator, guarantor, or indemnitor goes bankrupt and no other form of financial assurance has been provided for the owner or operator's USTs. The Agency requests comments on the degree to which a written instrument from the owner or operator, guarantor, or indemnitor would improve the Agency's recovery in bankruptcy actions.

2. Applicability to UST Requirements. Section 9003(d)(2) of RCRA Subtitle I lists self-insurance as one of the mechanisms allowed to demonstrate evidence of financial responsibility. EPA has included a financial test as a method of demonstrating financial responsibility in several regulations proposed and promulgated since 1982, including the financial responsibility regulations for closure, post-closure care, and liability coverage promulgated under Subtitle C of RCRA and the proposed financial requirements for corrective action for known releases at hazardous waste treatment, storage, and disposal facilities. Moreover, many other government agencies (e.g., the U.S. Coast Guard, the Office of Surface Mining, and the Nuclear Regulatory Commission) have allowed financial tests in their financial responsibility regulations. (See the "Federal Financial Responsibility Requirements Under Federal Environmental Laws;" November 1986, Draft Report.)

Underground storage tanks are owned by some of the largest and most financially viable firms in the world. Many of these firms currently assume financial responsibility for their USTs; that is, they are already paying from their own funds any corrective action and third-party liability costs arising from release incidents involving their USTs. Allowing the use of a financial test as an assurance mechanism will enable these large, financially viable firms to provide evidence of financial responsibility without having to pay the costs of procuring financial mechanisms from other parties.

Allowing the use of a financial test also may have another important advantage. As discussed elsewhere in this preamble, EPA is concerned that financial responsibility regulations may place an additional burden on an already constrained pollution liability insurance market. If the most financially viable firms can self-insure, insurance may become more available to firms that do not have the size and financial strength to self-insure or to obtain other mechanisms.

To qualify as a self-insurer, a guarantor, or an indemnitor; a firm must meet the following criteria:

(1) The firm must have a tangible net worth equal to at least 10 times the appropriate aggregate, which is determined by the number of tanks for which the financial test is being used to demonstrate financial responsibility to EPA (or to an authorized State). If the firm is also using a financial test to demonstrate financial responsibility to EPA (or an authorized State) for the costs of:

(a) Closure and/or post-closure care at a Subtitle C facility (pursuant to 40 CFR 284.143, 284.145, 285.143 and 285.145 or to applicable regulations of an authorized State); and/or

(b) Liability coverage at a Subtitle C facility (pursuant to 40 CFR 284.147 and 285.147 or to applicable regulations of an authorized State); and/or

(c) Corrective action at a Subtitle C facility (pursuant to section 3004(u) of the Resource Conservation and Recovery Act, as amended, and 40 CFR 284.101, or to applicable regulations of an authorized State); and/or

(d) Current plugging and abandonment at a Class I Hazardous Waste Injection Well (pursuant to 40 CFR 144.63 or to applicable regulations of an authorized State), the firm must have tangible net worth equal to at least 10 times the sum of these costs plus the required aggregate coverage for its USTs.

(2) The firm must have a tangible net worth of at least $10 million.

(3) The owner or operator must either:

(a) File financial statements with the SEC at least annually; or

(b) Report the firm's tangible net worth annually to Dun and Bradstreet, which must have assigned the firm a financial strength rating of 4A or 5A.

(4) The firm's year-end financial statement, if independently audited, cannot include an adverse auditor's opinion or a disclaimer of opinion.
The Agency decided to require that firms using the financial test to qualify as self-insurers, guarantors, or indemnitors calculate the appropriate level of aggregate coverage based on the number of tanks that are being self-insured, guaranteed, and/or indemnified. For firms that are using a financial test to assure the obligations of more than one UST owner or operator, another approach would be to add together the required aggregate for each owner or operator to arrive at the total amount to be covered by the firm using the financial test. Thus, if a firm were using a financial test to provide a guarantee to an UST owner with 50 tanks and, consequently, a required aggregate of $2 million and an indemnity agreement to another UST operator, also with 50 tanks and a required aggregate of $2 million, the total level of coverage required for purposes of the financial test would be $4 million. The Agency rejected this approach, since some of the largest corporations in the United States might not have been able to guarantee—or indemnify the firms they own or supply.

EPA recognizes that basing the required aggregate level on the number of tanks to be self-insured, guaranteed, and/or indemnified is associated with some small degree of risk under certain highly unlikely conditions. For example, it is theoretically possible but highly improbable that a firm using the financial test to demonstrate assurance for hundreds of thousands of USTs could do so with a tangible new worth of $60 million (i.e., 10 times the maximum required aggregate coverage of $6 million). EPA nevertheless considers that it is extremely unlikely that a firm with a $60 million tangible net worth would be in a position to, or would wish to, guarantee or indemnify hundreds of thousands of USTs. However, the Agency is considering the possibility of extending the aggregate schedule beyond $6 million for firms using the financial test of self-insurance.

The financial test of self-insurance proposed by today's rule differs from the Subtitle C financial test for liability coverage promulgated under 40 CFR 264.147 and 265.147 in several respects. These differences, and the reasons for them, are briefly described in Section E.3 below.

In devising a financial test of self-insurance to be included in today's proposal, the Agency adhered to the following principles:

- The test should not allow more than one percent of firms using the test to fail without providing alternative financial assurance.
- The test should account for other financial obligations to EPA (or to an authorized State) that the firm is assuming by means of a financial test.
- The test should be easy to administer and verify and available to financially strong firms with very different financial structures. Specifically, the test should be available to privately held firms.

Because the per-occurrence and aggregate levels of coverage required by today's proposal should be sufficient to ensure that a firm's corrective action and third-party compensation costs will be exceeded no more than one percent of the time, the Agency reasoned that the same basic principle should apply to the financial test of self-insurance. In other words, the financial test of self-insurance should ensure that at least 99 percent of self-insuring firms will be able to meet corrective action and third-party compensation obligations. The Agency has not calculated the comparable level of safety achieved by the Subtitle C test because the Subtitle C test was developed according to a different principle: namely, that the financial test should minimize the sum of public and private costs. (Further information on the principles underlying the Subtitle C financial test, see the Background Document for the Financial Test and Municipal Revenue Test [November 30, 1981].) In contrast, the principle adhered to in developing today's proposed financial test of self-insurance is that it should achieve the same level of safety as the per-occurrence level of coverage suggested by Congress.

The Agency is aware that some UST owners or operators, guarantors, or indemnitors may be using financial tests to provide evidence of financial responsibility in accordance with other EPA regulations or comparable regulations of authorized States. In particular, an owner or operator, guarantor, or indemnitor may be using a financial test to demonstrate financial responsibility for the cleanup or post-closure care, liability coverage, and corrective action under RCRA Subtitle C rules and for plugging and abandonment costs of Class I hazardous waste injection wells in the Underground Injection Well Control Program. To ensure that a firm has the financial strength to meet all its environmental obligations to EPA and authorized States, the Agency is requiring in the Subtitle I test that the firm have a tangible net worth of 10 times the sum of the annual aggregate amount the firm is covered to satisfy this regulation and all other amounts for which a financial test demonstrates financial assurance under other EPA regulatory programs and the comparable programs of authorized States.

EPA wishes to point out that by including in the Subtitle I financial test requirements other costs for which a financial test demonstrates assurance to EPA or to an authorized State, owners or operators, guarantors, or indemnitors are not relieved of their responsibility to comply with the other financial assurance requirements to which they are subject. For example, an owner or operator of both hazardous waste disposal facilities and USTs who wishes to use the financial test to satisfy financial assurance requirements must, in addition to complying with § 260.94, also comply with the financial test requirements of § 264.101, § 264.143, § 264.145, and § 264.147 for permitted facilities. (The comparable requirements of an authorized State), or § 265.143, § 265.145, and § 265.147 for intermediate status facilities. (To the comparable requirements of an authorized State).

The final principle guiding the development of the Subtitle I financial test (i.e., accessibility and ease of administration and verification) is more important in the Subtitle I than in the Subtitle C context. Approximately 5,000 firms and public entities must comply with the Subtitle C financial assurance requirements, while an estimated 400,000 firms and public entities will have to comply with the Subtitle I financial assurance requirements. Further, the Subtitle I regulated community includes firms in almost every four-digit SIC code and almost every type of municipal government. In addition, less than 50 percent of the firms regulated under Subtitle C are privately held, whereas EPA's preliminary estimates show that more than 80 percent of the firms that will be required to provide evidence of financial responsibility under Subtitle I are privately held and are thus less likely to have independently audited financial statements.

Therefore, today's financial test has been designed to be easier to administer and verify and to be more accessible to privately held firms than the Subtitle C test. First, less documentation is required from a firm to demonstrate its ability to meet the Subtitle I test criteria...
than as required for the Subtitle C test. (An independent certified public accountant's report on the firm's financial statements and a special report are not required.) In conformity with the reporting requirements for all of the financial assurance mechanisms, the chief financial officer's letter, while it must be prepared annually, does not have to be sent to the implementing agency unless it is requested (although it does have to be kept at the place of business of the owner or operator). Third, because an auditor's opinion is not a requirement of the Subtitle I financial test, it is easier and less costly for the large numbers of privately held firms in the Subtitle I regulated community to use this financial test than it is for privately held firms to use the Subtitle C test. These and other differences between the two financial tests are discussed in more detail below.

3. Comparison of Subtitle I Financial Test of Self-Insurance with the Subtitle C Test for Liability Coverage. Because it is used to demonstrate responsibility for contingent costs, the Subtitle I financial test is more comparable to the Subtitle C test for liability coverage than to the Subtitle C test for closure and post-closure care. The Subtitle I financial test nevertheless differs from the Subtitle C test for liability coverage in the following respects:

(1) The tangible net worth requirement being proposed today is 10 times rather than 6 times the obligations to be covered.

(2) The financial test proposed today does not have a net working capital requirement or a requirement that owners or operators, guarantors, or indemnitors have one of the top four bond ratings assigned by Moody's or Standard and Poor's.

(3) The financial test proposed today does not have a requirement that a firm have a specific amount of assets within the United States.

(4) The financial test proposed today does not require an owner or operator, guarantor, or indemnitor to have or submit his financial statements, nor does it require an independent certified public accountant's report on the financial statement, or an independent certified public accountant's special report attesting to the accuracy of the information presented by the owner or operator, guarantor, or indemnitor.

(5) The chief financial officer's letter, while it must be updated annually and kept at the UST facility or the place of business of the owner or operator, does not have to be sent to EPA unless it is specifically requested by the Regional Administrator.

The Subtitle I financial test requires that firms have tangible net worth equal to 10 times the annual aggregate amount to be covered (plus specific other costs for which the owner or operator, guarantor, or indemnitor is using a financial test to demonstrate financial responsibility to EPA or to an authorized State). The Subtitle C financial test for liability coverage requires that firms have a tangible net worth equal to 6 times the annual aggregate amount to be covered and additionally imposes a net working capital or bond rating requirement. These differences are accounted for by the different goals these two financial tests were designed to achieve. The Subtitle C financial test was designed to minimize the sum of public and private costs. In contrast, the Subtitle I financial test was designed to ensure that at least 99 out of 100 self-insuring firms would be able to meet their corrective action and third-party compensation obligations. EPA's analysis shows that a firm that incurs costs that are equal to or less than one-tenth of its net worth has less than a one percent probability of failing as a result of its attempts to meet these costs (see supporting document and "Documentation of the Affordability Model," Meridian Research, Inc. and Versar, Inc., 1987- both can be found in the rulemaking docket).

The proposed Subtitle I financial test requires a tangible net worth figure, which is equal to or less than the sum of intangible items as goodwill and rights to patents or royalties. The tangible net worth requirement of Subtitle I, like that of Subtitle C, is used to ensure that the assets being used to demonstrate financial responsibility to meet corrective action or third-party compensation obligations are more readily converted into cash than are some intangible assets such as goodwill. Like the Subtitle C financial test for liability, the Subtitle C financial test of self-insurance requires that firms have at least $10 million in net worth. The Agency included this requirement for two reasons:

(1) Firms with less than $10 million in net worth fall at a significantly greater rate than firms with more than $10 million in net worth.

(2) As the net worth of a firm decreases, the likelihood increases that USTs that experience releases will be located on property representing a significant portion of the firm's net worth. Therefore, a firm with less than $10 million in net worth is less likely to be able to pay for cleanup and third-party compensation as a result of an UST release.

This net worth requirement is required in addition to the net worth multiple-requirement, since firms using this financial test in combination with other mechanisms (see Section III.D.1) could conceivably meet the multiple with tangible net worth of less than $10 million.

The Subtitle C financial test for liability coverage also requires either a specified level of net working capital or a certain bond rating. The Agency did not include a net working capital requirement in the Subtitle I financial test for the following reasons:

- Even without such a requirement, the Agency was able to achieve its objective of assuring that 99 out of 100 firms passing the test would not fail without providing alternative financial assurance.

- Many viable UST-owning firms that almost always meet their financial obligations (e.g., electric utilities) often do not have positive net working capital. The bond rating requirement in the Subtitle C test was allowed primarily as an alternative to the net working capital requirement because, as mentioned above, the Agency recognized that many strong and financially viable firms, such as electric utilities, do not normally maintain large amounts of net working capital. Because the financial test of self-insurance being proposed today does not have a net working capital requirement, there is no need for an alternative to ensure the test's availability to firms such as utilities.

The Agency has not proposed to require that firms using a financial test of self-insurance demonstrate that they have a minimum amount of assets in the United States, for two reasons: First, many privately held firms would incur additional costs to meet this requirement. Privately held firms that make their financial statements available to a financial database service, such as Dun and Bradstreet, do not always break out their United States assets separately. Therefore, these firms could not meet this requirement without incurring additional costs to verify the amount of their U.S. assets. Second, EPA could, if necessary, enforce judgments against the foreign assets of these firms if they failed to fulfill their financial assurance obligations.

According to the evidence already gathered by the Agency (see the EPA-sponsored report entitled "Financial Profile of Retail Motor Fuel Marketing Firms" in the docket for today's proposal), almost all firms that can satisfy this financial test have U.S. assets well above those that would be necessary to meet their financial
assurance obligations. The Agency reasoned that it was highly unlikely that firms passing the financial test would have insufficient U.S. assets to meet their financial assurance obligations, or that these firms would be willing to jeopardize their further participation in the U.S. market by failing to meet their financial assurance obligations.

Accordingly, the Agency did not feel justified in imposing additional costs on UST-owning firms wishing to use the financial test by requiring a minimum amount of U.S. assets.

Because firms using the financial test do not have to submit their financial statements to EPA, the Subtitle I test requires that firms opting to use the test either file annual financial statements with the Securities Exchange Commission (SEC) or report financial data to Dun and Bradstreet. EPA can easily obtain a firm's financial data from either of these two sources.

To verify that the financial data reported by a firm are accurate, the Subtitle C financial test requires that firms be independently audited. Firms that annually file financial data with the SEC must be independently audited to meet the SEC's requirements. Therefore, in this respect, the Subtitle I test departs from the Subtitle C test in allowing firms to submit financial data to Dun and Bradstreet as an alternative to using information from independently audited financial statements. Firms using this alternative, however, must receive from Dun and Bradstreet a financial strength rating of 4A or 5A.

EPA has decided to allow the use of Dun and Bradstreet financial reports and financial strength ratings in the Subtitle I financial test to provide an opportunity for privately held firms to make use of this financial test. There are many large firms that are privately held but that have a sufficiently high tangible net worth to be able to qualify as self-insurers.

A financial strength rating of 4A from Dun and Bradstreet indicates that, in Dun and Bradstreet's professional judgment, the firm is believed to have a tangible net worth of $10,000,000 to $49,999,999. A 5A rating indicates a net worth of $50,000,000 or more. Dun and Bradstreet does not assign financial strength ratings to firms believed to have submitted questionable data or to be experiencing serious financial difficulties.

The overwhelming majority of the firms that can satisfy the financial test of self-insurance being proposed today, which requires that firms either file a financial statement annually with the SEC or report financial data to Dun and Bradstreet and receive a financial strength rating of either 4A or 5A, are independently audited and have an accountant to review the firm's fiscal year-end financial statements. The Agency recognizes that this will not be true in all cases, however. Dun and Bradstreet reports that approximately 75 percent of firms receiving 4A or 5A ratings from them submit independently audited financial statements, including an auditor's report attesting to his examination of the financial statement. The Agency has decided not to require firms wishing to use the financial test to be independently audited, so that firms that are not independently audited but have a 4A or 5A rating from Dun and Bradstreet (about 25 percent of the total with that rating) may use the test to prove financial ability.

The Subtitle I test, like the Subtitle C test, does not allow a firm that has received an adverse auditor's opinion or a disclaimer of opinion to qualify as a self-insurer. An adverse opinion indicates that, in the opinion of the auditor, a firm's financial statement does not present the firm's financial position, results of operations, or changes in financial position in a manner that conforms to generally accepted accounting principles (GAAP). A disclaimer of opinion on a financial statement states that the auditor does not express an opinion on the firm's financial statement. Auditors issue disclaimers of opinion if their examination of a firm's financial statements have been limited in some way or if there are uncertainties regarding the firm's financial statements.

Firms qualifying for the financial test on the basis of their Dun and Bradstreet financial strength ratings will not necessarily have had a complete independent audit and thus may not have an independent auditor's opinion. Although Dun and Bradstreet ratings and independent auditors' opinions do not necessarily reflect professional financial judgment with regard to the same financial measures, EPA believes that a Dun and Bradstreet rating of 4A or 5A will provide at least as great a margin of safety as the margin ensured by prohibiting independently audited firms from using the financial test if they have received an adverse opinion or a disclaimer of opinion from an independent auditor.

Like the Subtitle C financial test for closure, post-closure care, and liability coverage, the financial test of self-insurance requires the chief financial officer of the firm taking the financial test of self-insurance to certify annually in a letter that the firm meets the criteria of this financial test. Instead of sending this letter to EPA each year, however, the owner or operator is required to have this updated letter at the underground storage tank site or at his place of business. The Subtitle C test requires, in addition to such a letter, a copy of a certified public accountant's report on the firm's year-end financial statements, and a special report from the CPA verifying the information contained in the chief financial officer's letter. The requirement that a firm be independently audited and that the firm's financial statements be accompanied by an accountant's report attesting to his examination of the firm's financial statements was included in the Subtitle C test rather than explicitly requiring that firms report to the SEC.

The Agency recognized that some firms that are not publicly traded, and thus are not required to file independently audited financial statements with the SEC, might want to be independently audited in order to be able to use the financial test instead of procuring other, more costly, financial assurance mechanisms.

The Agency has not required firms using the Subtitle I financial test of self-insurance to obtain a special report from a certified public accountant verifying the information contained in the letter from the chief financial officer, because this type of requirement only makes sense in the context of a rule that requires the verification of many different or complex items. The Subtitle I financial test, which basically involves a minimum net worth requirement and a minimum net worth multiple, can easily be verified by EPA staff, or the staff of an implementing agency. Comments and suggestions regarding this provision are requested.

4. Availability. As proof of financial responsibility the financial test will be available only to owners or operators, guarantors, or indemnitors whose net worth (1) exceeds by 10 times the aggregate amount of coverage required for corrective action and third-party compensation (and, if applicable, other costs for which a financial test is being used to demonstrate financial responsibility to EPA or to an authorized State) and (2) equals at least $10 million. This requirement generally limits the use of the test to large firms that are financially stable. In the retail motor fuel marketing sector, only the large vertically integrated petroleum companies and some of the largest convenience store chains will be able to use the financial test. While such firms constitute less than 0.03 percent of the firms in this sector, they own more than 25 percent of the tanks in this industry.


The financial test may be used more widely for petroleum tanks owned by firms that are not engaged in retail motor fuel marketing, because firms in other sectors will typically own fewer tanks per firm and thus will have a lower aggregate requirement compared with their tangible net worth. In addition, the financial test may be used in combination with many of the other mechanisms (see discussion in Section III.D), thereby enabling firms to reduce the costs of financial responsibility by making partial use of the financial test. The Agency requests comments on the number of firms that are likely to be able to use the financial test of self-insurance, either alone or in combination with other mechanisms.

### P Guarantee (§ 280.95)

EPA is today proposing several related contractual forms by which one firm can promise to pay specified debts or perform specified obligations of another firm. These mechanisms include guarantees (§ 280.95) provided either by a related firm or by an unrelated firm engaged in a substantial business relationship with the owner or operator, and indemnity contracts (§ 280.96) provided by a firm engaged in a substantial business relationship with the owner or operator. (Indemnity contracts are discussed in detail in Section III.G of this preamble.) For both the guarantee and the indemnity contract, the guarantor or indemnitor must show that it is qualified to provide the guarantee or indemnity by first passing the financial test described above in Section III.E.

1. **Features of Mechanism.** A guarantee is a promise by one party (the guarantor) to pay specified debts or perform specified obligations of another party (the principal) in the event the principal fails to satisfy those debts or obligations. Generally, there is a contract between the principal and a third party, creating the primary obligation, and a contract between the principal and the guarantor creating the guarantee, which supports the primary obligation. If the principal defaults on the primary obligation, the guarantor is liable to the third party to meet the obligation created by the guarantee. In the guarantee in the proposed rule, however, that obligation between the principal and EPA or third parties rests on regulatory requirements and tort liability, not on a contractual obligation. If the owner or operator fails to perform corrective action or satisfy a judgment or award to third parties, the guarantor agrees to fund a standby trust, from which EPA will direct the payment of corrective action costs or third-party claims.

The wording of a guarantee used to meet the financial responsibility requirements in this proposed rule must be identical to that specified in § 280.95(c). EPA specifies how the guarantee must be worded to ensure that it will be legally sufficient and provide adequate financial assurance.

2. **Applicability to UST Requirements.** EPA has modified the basic guarantee for use in a number of financial assurance programs. For example, under RCRA Subtitle C financial responsibility regulations, 40 CFR 284.143 and 285.143, a guarantee given to EPA or a State by the corporate parent (i.e., a corporation that directly owns 50 percent or more of the voting stock of the owner or operator) may be used to provide financial assurance for closure and post-closure care of a hazardous waste management facility. Under 40 CFR 284.147 and 285.147 of the Subtitle C regulations, a guarantee given to any and all third parties who may suffer bodily injury or property damage from sudden or nonsudden accidental occurrences arising out of the operations of a hazardous waste management facility may be used to provide financial assurance for liability coverage. Finally, EPA recently proposed to allow a guarantee by the parent corporation of a hazardous waste facility to be used to provide financial assurance for corrective action (51 FR 37854, October 24, 1986). In all of these situations, the underlying obligation that the guarantee supports must be a regulatory requirement or tort liability.

The guarantee being proposed today is a guarantee that the guarantor will provide a specified amount of funds for corrective action and/or third-party liability if the owner or operator of the petroleum UST does not. It differs from the guarantees in the Subtitle C regulations described above because the Agency has decided to allow both related firms and firms engaged in a substantial business relationship with the owner or operator to provide guarantees.

The Agency is allowing related firms that own a controlling interest in the owner or operator (parent firm), firms that own a controlling interest in a parent firm of the owner or operator, and affiliated firms that are controlled by a parent that also owns a controlling interest in the owner or operator to provide a guarantee. As defined in § 280.94, "controlling interest" means direct ownership of at least 50 percent of the voting stock. The Agency requests comments on these proposed definitions.
determine how States would view a guarantee provided by an unrelated firm as it relates to the State insurance laws. Most contacts at the State insurance commissions responded that the question would require examination on a case-by-case basis. Some States asked if a premium would be charged by the guarantor or if the guarantee would be available to the general public. Either circumstance would make regulation more likely. In order to ensure that State insurance regulations do not call into question the validity or enforceability of the guarantee, EPA is requiring, under §280.95(a)(ii) of the proposed rule, that the guarantee can be used to provide financial assurance only if such mechanisms are certified as valid and legally enforceable by the Attorney General of the State in which an owner or operator’s petroleum tanks are located.

3. Availability. Because it is difficult to project whether the guarantee mechanism can be generally available to owners or operators of USTs containing petroleum, the Agency requests comments on factors that might affect the willingness of corporate affiliates and unrelated firms with substantial business relationships with owners and operators to provide guarantees.

4. Qualifications of Guarantors. a. Guarantee by Related Firm. The Agency will recognize a guarantee from any corporation, partnership, or other firm possessing the necessary ownership interest in the firm that is the owner or operator of the petroleum UST (i.e., a corporation or other firm that directly owns 50 percent or more of the voting stock of the owner or operator). In addition to demonstrating the necessary ownership interest, the parent firm must demonstrate annually that it passes the financial test proposed in §280.94 and described in Section III.E of this preamble.

In addition, the Agency will allow a guarantee from a firm possessing a controlling interest in the parent of the owner or operator, or from a firm that is controlled by a parent that also owns a controlling interest in the owner or operator. These relationships are sufficient to avoid regulation in most cases under State insurance laws. The Agency requests comments on whether the rule should state in more detail who may qualify to issue the guarantee.

b. Non-Parent Guarantee. As described above, EPA also is proposing to recognize guarantees for financial assurance for petroleum USTs from non-parent firms that demonstrate that they pass the financial test requirements of §280.94 and who are engaged in a substantial business relationship with the owner or operator for whom the guarantee is issued incident to that business relationship.

EPA is requesting public comments on several issues related to the guarantee provision: first, on the wording of the guarantee, in particular on whether any changes to the wording would facilitate the settlement of third-party liability claims against the guarantor; second, on whether the wording of the guarantee should vary between guarantees provided by related and non-related firms; and third, on whether the guarantor should be required to indicate how claims would be assigned priorities, investigated, or paid.

G. Indemnity Contract (§280.96)

1. Features of Mechanism. Indemnification is a two-party contractual mechanism under which one party can obtain protection from another party against future losses or harm. An indemnity generally is for actual losses or damage [a “contract for indemnity”]. Under such a contract, if the indemnitee actually suffers a loss, the indemnitee must pay the damages and is then reimbursed by the indemnitor. However, indemnity contracts (including insurance contracts, which are generally defined as a form of indemnity) may also require the indemnitor to pay the damages directly, and it is this type of contract that is being proposed by EPA.

To satisfy the requirements in today’s proposal, if an owner or operator chooses to establish an indemnity contract to provide financial assurance, he must use the language provided in §280.96. The standard language requirement relieves owners or operators from developing their own instruments and allows all parties (EPA, States, owners and operators, and indemnitors) to determine quickly whether particular instruments satisfy the regulatory requirements. The Agency solicits comments on the proposed wording requirement and on the specific wording itself.

2. Application to UST Requirements. In order to provide a broad range of options, the Agency is proposing to include indemnity contracts in the group of potential financial assurance mechanisms. Under this option, a firm with a substantial business relationship with the owner or operator may act as indemnitor, promising to indemnify the owner or operator for corrective action costs or third-party claims by paying a specified sum into the standby trust. The Agency believes that indemnities are currently being used within the petroleum industry for similar purposes. EPA does not have the authority, and is not attempting, to restrict the use of existing indemnity arrangements. However, EPA also believes that insurance or guarantees may be preferable to the indemnity contract in many situations. Therefore, owners or operators may meet the financial responsibility requirements only if the indemnity is provided by firms that are involved in a substantial business relationship with the owner or operator.

The firm providing the indemnification is required to show that it is qualified to provide financial assurance by means of this instrument by demonstrating annually that it passes the financial test proposed in §280.94 and described in Section III.E of this preamble. Another feature of the indemnity also strengthens the assurance that it provides: the indemnity payment does not go to the owner or operator, but instead, according to the contract, is placed directly into the standby trust.

Because indemnity contracts may be regulated under State insurance laws, the Agency is requiring a certification from the Attorney General of each State in which the contract might be used that the instrument is a valid and enforceable contract under State law. EPA has contacted approximately 15 State insurance commissions to determine how States would view a non-parent indemnity contract under the State insurance laws. Although the issue would be examined on a case-by-case basis, a majority of the States might consider it necessary for the non-parent corporation to qualify as an insurer unless the indemnity is provided incident to an existing business relationship. The Agency therefore is only allowing such firms to provide the indemnities.

3. Availability. The Agency does not have sufficient information to project the general availability and use of this mechanism. EPA is, therefore, requesting comments on whether firms currently in the petroleum industry, such as bulk petroleum suppliers, are already using indemnity contracts, between either related or unrelated corporations. The Agency further requests comments on the legal, economic, or financial factors that might govern the availability and use of indemnities.

H. Insurance and Risk Retention Group Coverage (§§280.97 and 280.98)

1. Features of Mechanisms. In the legal sense, insurance is a contractual arrangement in which the insurer agrees to compensate the insured for losses. The payment that the insurer receives is called a premium, and the insurance
contract is called a policy. By purchasing insurance, the insured transfers financial risk to the insurer. If insurance is purchased to satisfy a regulatory requirement (i.e., to provide evidence of financial responsibility for corrective action and third-party compensation), the regulatory agency (i.e., EPA) is not a party to the insurance contract. In this way, insurance differs from some of the other types of financial guarantees permitted by today's proposal. Insurance also differs from these other mechanisms in that its cost is actuarially based (i.e., the insurer bases premium amounts on the expected value of the claims the insurer expects to pay).

Insurance to cover on-site and off-site corrective action costs and third-party liability claims for accidental releases by petroleum-containing USTs in the retail motor fuel marketing sector (which includes jobbers and other fuel wholesalers) is currently provided in one of two ways: in the form of a stand-alone pollution liability insurance policy or as part of a larger property and casualty policy including coverages for other risks (e.g., other types of property damage, theft, etc.).

Risk retention groups function in the same manner as insurance companies: the individual risks of group members are transferred to a risk pool administered by the group or association. In return, members of the association pay a premium based on the expected value of their individual losses. The cost of losses is borne by the risk retention group. The primary difference between an insurance company and a risk retention group is that insurance companies sell their services to the public at large, while risk retention groups are formed and operated by a group of members who face risks of a similar nature. Thus, risk retention group coverage is a type of insurance coverage. At this time, the Agency does not know whether the risk retention groups that may form to provide casualty coverage to members who must comply with the regulations being proposed today will provide these coverages in stand-alone pollution liability insurance policies, or as an element in insurance policies that also provide coverage for other risks.

2. Applicability to UST Requirements. Section 9003(a)(2) of RCRA includes insurance as one of the mechanisms that may be used to establish financial responsibility. Insurance was also one of the mechanisms authorized by the Agency to provide evidence of financial responsibility for bodily injury and property damage to third parties caused by sudden and nonsudden accidental occurrences arising from the operations of hazardous waste management facilities under Subtitle C regulations.

Today's proposal includes specific insurance requirements regarding:
- The qualifications of insurers.
- The qualifications of risk retention groups.
- "First-dollar" coverage.
- The provision by insurers of an endorsement or certificate of insurance, coverage limits exclusive of legal defense costs, and a one-year discovery period.
- It does not include specific requirements regarding policy type (i.e., occurrence-based versus claims-made format).

The following sections describe each of these requirements and the Agency's reasons for including them in today's proposal.

a. Qualifications of Insurers Other Than Risk Retention Groups. Today's proposal requires that insurers be licensed to transact the business of insurance or be eligible to provide insurance as an excess or surplus lines insurer in one or more States (§ 260.97(c)). These are the same qualifications required under 40 CFR 264.147 and 265.147 the Subtitle C liability coverage requirements for owners and operators of hazardous waste treatment, storage, and disposal facilities. These minimum qualifications will help to ensure that insurers are subject to some regulatory oversight by State insurance departments. At the same time, they should permit broad participation in the petroleum UST insurance market, since most insurers can easily meet the minimum qualifications. The Agency decided not to impose other requirements that might preclude involvement by otherwise qualified insurers. A rating in Best's Insurance Reports, which is available only to companies that have been in business for at least five years.

b. Qualifications of Risk Retention Groups. Today's proposal requires risk retention groups issuing coverage to "be chartered and licensed in at least one State and be authorized to operate in each State where a covered underground storage tank is located" (§ 260.98(c)). The Agency believes that these are minimal qualifications designed to conform to the requirements for risk retention groups included in the Risk Retention Act of 1986. Some of the controls over risk retention groups specified in the Risk Retention Act include requirements that each group submit:
- An operating plan, including a rating schedule, coverages to be offered, and limits, to every commissioner in States where the group intends to do business before it begins operation and
- A copy of the annual financial statement the group files in its domicile to regulators in every State in which it operates. The statement would have to be certified by an independent accountant and include an opinion on the group's reserves by a qualified actuary.

In addition, Federal courts have the authority to issue an injunction to stop a risk retention group from operating in all States if the court finds that the group's financial condition is precarious.

The Agency requests comments on the adequacy of these controls in ensuring that risk retention groups providing coverage in connection with this regulation will be able to fulfill their obligations to owners and operators and to the public given that different States will have different licensing requirements. Chartering States may impose minimum capitalization requirements on a risk retention group to guard against a group's insolvency. In addition to State requirements, would some type of Federal solvency or capitalization requirement be appropriate for groups providing coverage in connection with this regulation? To what extent would a Federal solvency requirement discourage the formation of risk retention groups to provide evidence of financial responsibility for corrective action and third-party compensation for damages arising from UST releases?

c. First-Dollar Coverage. Today's proposal requires that the insurance policy (or an endorsement to the policy) state that the insurer is liable for the payment of amounts within any deductible applicable to the policy. This requirement does not affect the insurer's right to be reimbursed by the insured for any payments made by the insurer.

By including this requirement, the Agency is attempting to ensure that disputes over who is responsible for paying amounts within deductible limits (i.e., the insurer or the insured) will not interfere with the prompt performance of corrective action measures or
payment of third-party liability claims. The same provision was included in the Subtitle C liability coverage requirements. The Agency is aware that this type of provision is standard in at least some UST pollution liability policies.

d. Certificates or Endorsements. Insurance policies issued in connection with these requirements must be either amended by attaching the endorsement or evidenced by the certificate of insurance, as specified in § 280.97(b). The purpose of requiring one of these additional documents is to demonstrate to the owner or operator and to the implementing agency that the insurance provided includes coverage for taking corrective action and for compensating third parties for bodily injury and property damage from accidental releases arising from operating an underground storage tank and that this coverage complies with Subpart I requirements. EPA believes that, because of the wide variation in types of policies that may be used to satisfy these requirements, owners and operators should have one or the other of these documents to demonstrate that the required coverage has been obtained. In addition, the Agency is concerned that some owners and operators of petroleum-containing USTs, particularly in non-retail motor fuel marketing sectors, may be of the opinion that their present insurance coverage satisfies these regulations, when, in fact, it does not.

The proposed language in the certificate of insurance and endorsement is based on the language for similar mechanisms under the Subtitle C liability coverage rules (§§ 294.151 (i) and (j)). The Subtitle C language has been modified slightly, to recognize explicitly the option of coverage through formation of a risk retention group coverage is allowable. The Agency requests comment on whether the proposed forms are acceptable to risk retention groups and other insurers.

e. Legal Defense Costs. While today's proposal requires that the insurance coverage provided to satisfy these requirements be exclusive of legal defense costs, the Agency acknowledges that there are valid arguments for the inclusion of legal defense costs and may permit these costs to be included in insurance limits of liability in the final rule. EPA's primary reason for excluding legal defense costs at this time is to ensure that the level of coverage provided by insurance is equivalent to the level of coverage provided by any of the other financial assurance mechanisms. For example, the $1 million in per-occurrence coverage provided by surety bonds or letters of credit can only be used to pay corrective action and/or third-party compensation costs; the surety bonds or letters of credit cannot be used to cover legal defense costs. If an owner or operator having one of these mechanisms wants to defend himself against a claim brought by a third party, he will have to provide the funds for his own defense from another source.

Insurance traditionally functions in another manner. The insured is required to surrender his right to conduct a legal defense against a third-party claimant to the insurance company. The insurer conducts a legal defense on behalf of the insured, with the funds for the defense being paid for by the insurer. These funds are generally included in the insurance policy's limits of liability.

In the third-party liability regulations promulgated under Subtitle C of RCRA (40 CFR 294.147 and 285.147), the Agency similarly required that insurance used to satisfy these regulations be exclusive of legal defense costs. The Agency excluded legal defense costs from the required limits of liability because of its concern that legal defense costs could absorb a major portion of the required coverage.

The Agency is nevertheless aware that in the Subtitle I context, it might not be important that insurance coverage be exclusive of legal defense costs. When the Subtitle C regulations were promulgated, the Agency had very little information about the frequency and costs of claims. In contrast, the Agency is aware that the major UST insurers have not yet paid a claim arising from an UST release (including the costs of corrective action, compensation of third parties, and legal defense) for more than $1 million. (During the same time period, the per-occurrence limits offered by insurers were often well in excess of $1 million.)

The Agency is also aware of the strong possibility that requiring insurance coverage to exclude legal defense costs may act to limit the number of USTs that are covered by insurance. Currently, many firms in the retail motor fuel marketing sector have insurance covering corrective action and compensation of third parties, but this insurance is only being sold by a few companies and it is not exclusive of legal defense costs. The Agency is also concerned that requiring insurance to be exclusive of legal defense costs would inhibit the entrance of new insurers (including risk retention groups) into the UST insurance market. In the promulgation of these regulations, the Agency wants to avoid the imposition of further constraints on an already limited insurance market. The Agency is aware that its primary concern, protection of human health and the environment, may be better served if larger numbers of UST owners or operators are able to purchase insurance, even if this insurance does not have all of the features that may be desired by EPA, than if UST owners or operators are not able to purchase insurance. For this reason, the Agency requests comments on whether current or prospective UST insurers are or would be willing to issue UST pollution liability insurance that is exclusive of legal defense costs and the reasons for their decisions if insurers are willing to issue this type of UST insurance coverage. EPA desires to know how this would be done and how much it would cost.

f. One Year Discovery Period. The Agency recognizes that there are two basic policy types that may be used to provide insurance in connection with this requirement: occurrence-based and claims-made. Many CGL policies are issued on an occurrence basis, while stand-alone pollution liability policies are currently issued on a claims-made basis. An occurrence-based policy covers claims arising from events that occur during the policy period, regardless of when a claim is filed. Under such a policy, the insured could be reimbursed for cleanup costs for a release that occurred within the period covered by the policy, even though the release was not discovered (and the claim was not submitted) until after the end date of the policy. In contrast, under a claims-made policy, coverage is triggered only by claims made during the policy period. In a claims-made policy, a retroactive date may limit coverage to damages caused only by incidents that occur subsequent to that date. Thus, even if a claim is filed during the policy period, coverage would not be triggered if the claim arose from a release that had occurred before the retroactive date. The retroactive date is usually the date that the policyholder's first claims-made policy from an insurer went into effect. A retroactive period provision allows insurers to buy coverage that will apply to the period between the policy's retroactive date and the issue date of the policy. A discovery period provision (sometimes referred to as an extended reporting period or "tail" coverage) provides that an insured, for the payment of an additional premium, may extend coverage beyond the expiration of the policy for losses occurring during
the policy period, but not discovered (or claimed) until after its expiration.

The Agency is not proposing to require owners or operators to procure either occurrence-based or claims-made policies. However, the Agency is concerned that a claims-made insurance policy may leave gaps in coverage. For example, gaps may occur between claims-made insurance policies if claims are reported after the expiration date of one policy, from an incident that occurred during the policy period but before a new policy’s retroactive date. Gaps in coverage may also arise when an owner or operator shifts to a claims-made insurance policy from certain other mechanisms, such as a guarantee. Claims made after the guarantee termination date for damages caused by releases occurring during the corporate guarantee’s effective period may not be covered by the guarantee or insurance unless the owner or operator purchases a policy providing coverage retroactive to before the date of issue.

In order to reduce the likelihood of coverage gaps when insurance policies are changed or substituted, the Agency is proposing to require that all claims-made insurance and risk retention group policies include a one-year discovery period provision. Such tail coverage is available in existing policies (typically, at not more than 50 percent of the annual premium cost for the cancelled or unrenewed policy). EPA solicits comments from interested parties on the problem of insurance-related coverage gaps and suggestions for other options that might alleviate the problem.

3. Availability. The Agency recognizes that insurance will generally be the “mechanism of choice” for those owners or operators who cannot satisfy these financial responsibility requirements by passing a financial test of self-insurance or by obtaining a guarantee or indemnity agreement. For owners or operators, insurance has two major advantages over such mechanisms as letters of credit or surety bonds. First, insurance will be considerably less expensive than letters of credit or surety bonds for almost all owners or operators. For example, the fee for a surety bond or letter of credit is typically one to two percent of principal. Thus, an UST owner or operator would have to pay $10,000-$20,000 for a surety bond or letter of credit that provides $1,000,000 of coverage. In contrast, insurance coverage of $1,000,000 for an UST would likely cost only $2,000 to $4,000, depending on the type and condition of the facility and the UST, and the deductible selected. Second, insurance provides the owner or operator, as well as EPA, with financial assurance (i.e., insurers pay regardless of the owner’s or operator’s ability or willingness to pay), while surety bonds and letters of credit provide only EPA with financial assurance.

The Agency realizes that many UST owners and operators have been unsuccessful in their attempts to obtain pollution liability insurance for their USTs. According to information gathered by the Agency in meetings with insurers and industry associations for UST owners and operators in the retail motor fuel marketing industry sector, most jobbers, independent chain marketers, and convenience store owners generally can obtain pollution liability insurance for their USTs. However, the following categories of owners and operators in the retail motor fuel marketing sector have had difficulties obtaining pollution liability insurance for their USTs:

- Owners of USTs that do not meet underlying criteria, particularly those with tanks over 15 years old or without an ongoing inventory control program;
- Owners of chains of retail outlets who do not belong to a trade association;
- Open dealers (persons who own and operate one or two retail outlets).
- Lessee dealers (also called independent dealers), except those who are included as named insureds on the policies obtained by their owners.

EPA estimates that the total number of approximately 100,000 retail motor fuel outlets, owners of USTs at 90,000 of these outlets are not currently insured for pollution liability, while the owners of USTs at 100,000 of these outlets are likely either to have insurance or to have the financial capacity to pass the financial test of self-insurance included in today’s proposal.

To the best of the Agency’s knowledge, there is now an active market for pollution liability coverage for petroleum-containing USTs in industries other than retail motor fuel marketing. The Agency is uncertain of the extent to which the absence of such a market is the result of low demand for such insurance or of the unwillingness of insurers to cover such risks.

The Agency believes that the owners and operators of petroleum-containing USTs in industries other than retail motor fuel marketing have not actively sought to obtain all of these types of coverages in the past. Some of these owners and operators may have coverage as part of their CGL policies for the compensation of third parties for damages arising from sudden accidental releases. The Agency does not believe that most owners and operators of USTs in sectors other than retail motor fuel marketing currently have coverage for corrective action (including both on-site and off-site cleanup) or for compensating third parties for damages arising from nonsudden and sudden accidental releases.

The Agency is particularly interested in hearing from insurers and the regulated community with regard to both the cost and availability of pollution liability insurance for UST owners and operators, specifically:

1. For what classes or categories of USTs or UST owners and operators is the insurance coverage required by today’s proposal not generally available? What are the reasons for the general unavailability?

2. How are premiums for pollution liability insurance affected by the number of USTs or facilities covered, the size of deductibles, the characteristics of USTs or facilities covered, the levels of coverage provided, and the other types of coverages (e.g., worker’s compensation, credit card theft, etc.) that may be included in the entire policy package?

This information will aid the Agency in evaluating the regulatory impact of these regulations and in further developing suspension of enforcement procedures.

I. Surety Bond (§ 280.99)

1. Features of Mechanism. Surety bonds guaranteeing that the owner or operator will perform corrective action and/or compensate third parties, also known as performance bonds, are being proposed in § 280.99 as a financial assurance mechanism. Surety bonds represent agreements between three parties: the principal (i.e., the tank owner or operator); the obligee, the party to whom the principal makes a promise for completion of a specific act (i.e., the Agency); and the surety, the party that assures the obligee that the principal will fulfill his promise and, if the principal fails, that the surety will fulfill the principal’s obligation to the obligee. Thus, a surety bond guarantees that if the owner or operator fails to perform corrective action or compensate third parties injured by a release, the surety either will (1) perform the corrective action in accordance with the corrective action regulations or pay the third-party liability claims or (2) fund the standby trust, as required by the Regional Administrator, up to the level of the bond sum. There are two...
guaranteed levels of the proposed performance bond or "penal sum": the per-occurrence limit and the annual aggregate limit.

The Agency is proposing to allow performance surety bonds that provide sureties with two options: (1) to perform for the principal or (2) to pay the cost necessary to fulfill the principal's obligation. The Agency believes that allowing payment bonds in addition to performance bonds would be duplicative and provide no added benefit, because the surety can choose to exercise the payment option of the performance bond, which is equivalent to fulfilling the surety's obligation under a payment bond.

To satisfy the requirements in today's proposal, if an owner or operator chooses to use a surety bond to provide financial assurance, he must use the language provided in § 280.99(b). The standard language requirement relieves sureties of the burden of developing the language of acceptable surety bonds and allows all parties (state regulators, owners and operators, and sureties) to determine quickly whether particular instruments satisfy the regulatory requirements. The Agency solicits comments on the specific proposed language of the bond.

The Agency has developed procedures, proposed in § 280.108, for drawing on third-party financial assurance mechanisms, including surety bonds. Briefly, for corrective action claims, the owner or operator notifies the regional administrator of the release and submits a copy of the surety bond. If the owner or operator fails to undertake the corrective action, the regional administrator will direct the surety to fulfill its obligation under the bond, that is, to perform the corrective action or to fund the standby trust fund to cover the costs of the corrective action. Similarly, for third-party claims, the regional administrator must be notified of the release and send a copy of the surety bond. If an owner or operator fails to satisfy a third-party claim, attorneys representing the claimant and the principal on the bond must submit a signed certification of claim to the regional Administrator, or the claimant must submit a copy of a final court decision, as provided by § 280.108(a)(2)(ii). On the basis of the submission, the regional Administrator will instruct the surety to perform (i.e., pay the claim) or fund the standby trust in the amount of the claim. See Section III.R of this preamble for further discussion of the proposed procedures for drawing on the financial assurance mechanisms.

2. Applicability to UST Requirements. The surety bond is one of the mechanisms listed in section 9003(d) of RCRA as a mechanism that can be used to demonstrate financial responsibility for USTs. In addition, various programs administered by EPA and other Federal agencies allow surety bonds to be used to demonstrate financial responsibility. (See "Federal Financial Responsibility Requirements under Federal Environmental Laws.") Such programs provide precedents to allow both performance and payment bonds to be used to assure that a specified action will be taken to address noncontingent events (or events that are certain to occur), such as facility closure, and contingent events (or events that may or may not arise), such as a release that requires corrective action or triggers third-party liability claims.

The Agency allows owners and operators of hazardous waste management facilities to demonstrate financial responsibility for closure and post-closure care with both performance and payment bonds. Under the Subtitle C regulations, a performance bond can be used to assure that an owner or operator of a facility with a permit will perform closure and/or post-closure care according to an EPA-approved plan (40 CFR 284.143(c), 284.145(c)). The performance bond proposed to be allowed for UST financial responsibility is similar to the existing Subtitle C performance bond. The Subtitle C regulations also allow payment bonds to be used by owners and operators of permitted and interim status facilities to demonstrate financial responsibility for closure and post-closure care (40 CFR 284.143(b), 284.145(b), 265.143(b), and 265.145(b)). Regulations are proposed to allow performance bonds to be used to assure the costs of corrective action at hazardous waste management facilities that have experienced a release.

In addition to the RCRA Subtitle C financial responsibility program, EPA allows owners or operators of Class I hazardous waste injection wells to obtain performance bonds to assure the costs of plugging and abandonment, as required under the Safe Drinking Water Act (40 CFR 144.63). The Department of the Interior allows, under the authority of the Surface Mining Control and Reclamation Act, owners or operators of surface coal mining operations to use performance bonds to assure the costs of completion of reclamation of surface mines (30 CFR 800.12). In addition, the Nuclear Regulatory Commission has recently issued an advance notice of proposed rulemaking requesting public comment on various issues, including the use of performance bonds to demonstrate financial responsibility for the costs of cleaning up radioactive materials after sudden and nonsudden accidental or unexpected releases from radioactive materials handling facilities, spent fuel storage facilities, low-level radioactive waste land disposal facilities, and facilities related to uranium or thorium milling (50 FR 23960, June 7, 1985).

Although these programs allow the regulated parties to use performance bonds to demonstrate financial responsibility, surety bonds are not used generally. The Agency solicits information from sureties regarding whether surety bonds are likely to be available to owners and operators of USTs containing petroleum.

EPA has contacted several State insurance commissions to determine how States would view a surety bond for third-party liability coverage under the State insurance laws and has been informed that the same general principles probably would apply to surety bonds as apply to guarantees and indemnity contracts, as discussed in Sections III.F and III.G of this preamble. Although the issue may be examined on a case-by-case basis, a majority of the States may consider it necessary for the firm providing the surety bond to qualify as an insurer, particularly if the firm issuing the bond was not related to the owner or operator or providing the surety bond incident to its business activities. Two factors that may affect the decision are, first, whether a premium is charged, and, second, whether the surety bond would be made generally available. To address this issue, the proposed rule does not allow a surety bond to be used to demonstrate financial assurance unless the Attorney General in the States in which the tanker covered by the bond are located certify that the mechanism is valid and enforceable. See § 280.93(a)(ii).

3. Availability. The Agency is interested in receiving comments from the surety industry regarding the availability of the performance bonds proposed by today's rule. In particular, the Agency requests comments from surety companies on their willingness to issue performance bonds for third-party liability coverage and on the desirability of adding a separate payment bond mechanism.

4. Qualifications of the Surety Company. To be acceptable as a surety on a surety bond that names a branch or agency of the Federal government as the beneficiary, sureties must comply with the law and regulations of the Treasury...
Drafts on a letter of credit are not qualified to issue letters of credit. State lists may include the names of companies on the Treasury Circular 570 list. A State seeking approval of its UST program under Section 9004 may impose stricter qualification requirements than those in Circular 570. However, sureties that are not listed in Circular 570 are not qualified to issue bonds naming the State as beneficiary. State lists must include the names of companies listed on Treasury Circular 570 that are registered to do business in that State and may also include the names of companies not on the Circular 570 list. A State seeking approval of its UST program under Section 9004 may impose stricter qualification standards than the Department of Treasury's standards. However, sureties that are not listed in Circular 570 are not qualified to issue the letter have occurred exactly as stipulated in the letter. Therefore, if the Agency allowed different formats for the letter of credit, the validity of the letter providing financial assurance could be jeopardized if the issuer determines that the draft is not valid under the letter. The Agency requests comments and suggestions regarding the wording of the required letter of credit form.

2. Applicability to UST Requirements. Letters of credit may be used to satisfy the financial responsibility obligations of the owners or operators of hazardous waste management facilities, including RCRA Subtitle C closure and post-closure care financial responsibility regulations, and the proposed Subtitle C financial responsibility regulations for corrective action (51 FR 37854, October 24, 1986). These regulations allow an EPA Regional Administrator to draw on the letter of credit if the owner or operator does not perform final closure, post-closure care, or corrective action in accordance with EPA regulations, or if, in the event the letter of credit is cancelled, the owner or operator cannot substitute an alternative financial assurance mechanism.

Moreover, existing or proposed financial responsibility regulations promulgated by the Nuclear Regulatory Commission under the Price-Anderson Act, Atomic Energy Act, and Nuclear Waste Policy Act allow owners or operators of various types of facilities to demonstrate financial responsibility using a letter of credit. For example, owners and operators of nuclear reactors may use letters of credit to demonstrate financial responsibility for secondary coverage to pay public liability claims in the event that claims exceed the level of primary coverage (10 CFR 140.21). Thus use of letters of credit to cover contingent liabilities serves as a precedent for using letters of credit to cover potential corrective action costs and third-party liability claims arising from releases from underground storage tanks.

For use as financial assurance instruments for USTs, letters of credit are well suited to maintaining evidence of financial responsibility for corrective action. If an owner or operator failed to perform corrective action in accordance with Federal or State regulations, EPA could draw on the letter of credit and use the money to perform corrective action. The letter of credit is a less desirable mechanism for coverage of third-party liability claims, since the use of letters of credit places EPA in the position of collecting and distributing money provided by the issuing institution. However, this concern is addressed in the provisions under § 280.108 (see preamble Section III.R) for drawing on the financial instruments.

As discussed in Section III.D of this preamble, the proposed rule requires a letter of credit to be certified by the appropriate Attorney General that it is valid and enforceable in a particular State.

The Agency requests comments and suggestions regarding use of the letter of credit as an UST financial assurance mechanism.

3. Availability. Because the issuance of letters of credit is based on the creditworthiness of the customer, banks will provide letters of credit only for firms that they believe will be able to pay for corrective action or third-party claims and that have adequate assets that could be seized if the firm's performance under the letter of credit is not satisfactory. Smaller UST owning firms may be required to post collateral in excess of 100 percent of the value of the letter of credit in order to receive a letter of credit. Therefore, letters of credit generally will be available only to firms with the ability to meet large financial obligations and with strong customer relationships with the issuing institution. The Agency requests comments on the availability and costs of letters of credit for owners or operators of underground storage tanks containing petroleum.

4. Lines of Credit. The Agency considered allowing lines of credit as well as letters of credit as financial assurance mechanisms. A line of credit is an arrangement in which a bank agrees to lend, at its discretion, funds required by the borrower for a fixed time period. The borrower may draw on the line of credit at any time during the period, thus ensuring the borrower's access to liquidity for that period.

Lines of credit are not allowed for RCRA Subtitle C financial assurance for closure, post-closure care, or liability coverage. However, lines of credit are used interchangeably with letters of credit as financial assurance mechanisms for some purposes under financial responsibility programs of the Nuclear Regulatory Commission (see, for example, 10 CFR 140.21).

The Agency has decided against proposing lines of credit as allowable financial assurance mechanisms, because lines of credit may not provide adequate financial assurance. As opposed to letters of credit, which represent an unconditional substitution of the issuer's credit for the credit of the customer, lines of credit represent commitments to disburse to the
borrower at his request funds up to a specified amount. Although lines of credit usually provide a guarantee of liquidity to a borrower for a specific time period, they may not be funded if the credit standing of the borrower has changed when funds are requested. Thus, the assurance a line of credit provides is conditional.

The Agency requests comments and suggestions regarding its decision not to include lines of credit among allowable mechanisms for UST financial responsibility.

5. Qualifications of Issuing Institution. The Agency proposes to require that an issuing institution have the authority to issue letters of credit and that its letter-of-credit operations be regulated and examined by a Federal or State agency. This provision is identical to the requirements for letter-of-credit issuers for closure, post-closure care, and corrective action under RCRA Subtitle C regulations.

The qualification provision should provide adequate assurance of the solvency of issuers, but a stronger approach may be advisable. A recent Supreme Court decision found that letters of credit generally are not covered by State or Federal deposit insurance (FDIC v. Philadelphia Gear Corp., 54 U.S.L.W. 4523 (U.S.), May 27, 1986). Therefore, if the bank issuing a letter of credit becomes insolvent, the letter of credit may be unusable. To mitigate this potential problem, EPA could require that letters of credit be confirmed by a second issuer, who is usually chosen by the beneficiary. Under a confirmed letter of credit, the second issuer agrees to meet the obligation of the letter of credit if the issuing institution fails to do so.

Although obtaining a confirmed letter of credit should not double the cost, the total expense to the owner or operator of a confirmed instrument will be higher. The Agency requests comments and suggestions on this issue.

K. Use of State-Required Mechanism (§ 280.101)

A number of States have adopted, or may in the future adopt, regulations that require UST owners or operators to demonstrate financial responsibility for taking corrective action and/or compensating third parties for bodily injury or property damage. Like the Federal regulations, many of these State regulations may require owners or operators to use specific financial mechanisms for these purposes.

The Agency recognizes that for States that do not plan to seek or have not yet obtained UST regulatory program approval, differences between State and Federal financial responsibility requirements might result in duplication and unnecessary costs to owners and operators. In those States that receive authorization to operate an UST program in lieu of the Federal program, there will be no duplication since only the State’s requirements would apply. However, in those States that have not obtained Federal authorization, the owners or operators would be subject to Federal UST regulations and also to any State UST regulations that are in effect.

To avoid unnecessary duplication and costs, the Agency is proposing, in § 280.101, to allow owners or operators to use State-required mechanisms to meet the Federal financial responsibility requirements if the EPA Regional Administrator has determined that such mechanisms provide assurances that are at least equivalent to those of mechanisms specified in the Federal requirements.

"Use of State-required mechanisms" means that the owner or operator may use a State-required mechanism if the underground storage tank is located in a State that requires owners or operators of underground storage tanks to demonstrate financial responsibility for taking corrective action and/or compensating third parties for bodily injury and property damage. Allowing an approved State-required mechanism to qualify as a Federal mechanism will avoid duplication and unnecessary cost to UST owners and operators, while still providing adequate assurance of financial responsibility. As is allowed under Subtitle C financial responsibility regulations, the Regional Administrator may approve a State-required mechanism that is not otherwise specified under the Federal regulations if the mechanism provides a level of financial assurance at least equal to that provided under the Federal mechanisms.

The use of a State-required mechanism would be subject to EPA enforcement, as part of the Federal program. If an owner or operator wishes to use a State-required mechanism instead of the mechanisms allowed under the Federal regulations, the Regional Administrator must determine whether the State mechanism is at least equivalent to the mechanisms required under the Federal program. EPA is proposing to allow a State, any owner or operator, or any interested party to petition the Regional Administrator to determine that any or all of the State’s mechanisms are acceptable under the Federal program. The petition could be made on behalf of all of the UST owners and operators in the State, so that the Regional Administrator’s acceptance of the State-required mechanism would then allow all of the UST owners and operators in the State to meet Federal requirements by using the State-required mechanism. The petitioner would submit to the Regional Administrator a copy of the appropriate State statutory and regulatory requirements and a discussion of the amount of funds for taking corrective action and/or compensating third parties for bodily injury or property damage that may be assured by the mechanism or set of mechanisms for which the petitioner seeks approval.

The Regional Administrator will evaluate the equivalency of the State mechanism principally in terms of (1) certainty that funds will be available for the required corrective action activities and third-party compensation costs, (2) the amount of funds that will be made available, and (3) the types of costs covered by the funds. Of key importance in judging the certainty of coverage is the protection of the funds against claims of creditors, the initial qualifications of financial institutions that will provide the mechanisms, and provisions required for future contingencies, including bankruptcy, cancellation, or changing mechanisms. With respect to amount of financial assurance, both the total amount of funds assured as well as the amount assured at different points in time are crucial to the equivalency determination. If the amount of coverage provided by the State mechanism is less than that required by EPA, the owner or operator must establish additional financial assurance for the remaining amount, through any of the means allowed in the Federal regulation. If the types of occurrences or costs covered by the State mechanism do not include the types of occurrences or costs covered under the Federal requirements, the owner or operator must establish separate financial assurance for the types of occurrences or costs not covered by the State-required mechanism.

The proposed rule states that, pending a determination by the Regional Administrator, an owner or operator covered by a State-required mechanism for which a petition has been submitted will be deemed in compliance with Subpart I for the amount and types of costs covered by the mechanism. The Agency requests comment on the desirability of this provision, which is based on § 264.149 of the financial responsibility rules under the Subtitle C.
A condition of State program approval under Subsection 9004(a)(6) of RCRA is that the State promulgate requirements for "maintaining evidence of financial responsibility." Subsection 9004(c)(1) authorizes the use of "corrective action and compensation programs administered by State or local agencies or departments" as mechanisms to provide evidence of financial responsibility in State programs. In §280.102 of today's proposal, EPA is authorizing the use of such corrective action and compensation programs (referred to as "State funds or other State assurances") to demonstrate financial responsibility, even for USTs in States that do not have State UST program approval or in States that have not applied for such approval.

In light of the Agency's philosophy of allowing all reasonable methods of demonstrating evidence of financial responsibility for corrective action and compensating third parties, EPA will review and approve State funds or other State assurances that provide assurance at least equivalent to that provided through other allowable mechanisms. The Agency is aware that there are many possible approaches that can be used by States to design financial responsibility programs for corrective action and third-party compensation. Many States have funds that can be used to clean up petroleum product releases. Revenue sources for these State funds include fees (e.g., on tanks), taxes (e.g., on gasoline sales or imported petroleum), fines, penalties, and/or legislative appropriations. Some existing State funds are modeled after the Federal Hazardous Substance Response Trust Fund (or Superfund) but differ from the Superfund in that they can be used to address petroleum releases in addition to hazardous substance releases. Other State funds were created solely to address petroleum releases. A State also may wish to sponsor insurance-type corrective action and third-party compensation programs (i.e., programs that allow owners or operators who cannot purchase insurance from private providers to purchase it from the State). A State might choose to provide State funds for UST financial responsibility for only a certain class or classes of UST facilities in the State or for certain types of costs (e.g., corrective action, compensation of third parties, emergency cleanups). Some States have funds—for example Florida's Inland Protection Fund and Maine's Groundwater Oil Cleanup Fund—that are explicitly authorized by State statute to be used for cleanup of contamination caused by underground storage tanks. Thus, existing State funds vary in their relative ability to be used to demonstrate financial responsibility for corrective action and third-party compensation at petroleum USTs.

EPA is proposing today that the person within the State government who is designated to authorize State fund expenditures or to administer the UST financial responsibility program describe, in a letter to the Regional Administrator, the types of coverage to be provided (i.e., corrective action, compensation of third parties, or both) and the level of coverage to be provided. The letter must describe the class of tanks covered (e.g., based on size, age, industry).

The Regional Administrator may require the State to submit additional information. A State official, rather than an individual owner or operator, must submit a letter to EPA on behalf of the owners or operators to be covered by the State assurance. Because a State fund or other assurance may be designed to cover certain class or classes of UST facilities in a State or only certain types of costs, EPA wants the State to interpret the laws and other documents establishing the mechanism and to specify what is covered.

The Regional Administrator will evaluate the equivalency of State funds or other State assurances principally in terms of (1) certainty that funds will be available for taking corrective action and/or compensating third parties (2) the amount of funds that will be made available and (3) the types of costs covered. The certainty that funds will be available under a State fund or other State assurance must be at least equivalent to the certainty that funds will be available under other allowable mechanisms. If the amount or types of costs covered by a State Fund or other State assurance are not as inclusive as the coverage required by §280.92, other allowable mechanisms must be used to cover the amounts or types of costs not covered by the State fund or other State assurance.

The proposed rule states that, pending a determination by the Regional Administrator, an owner or operator covered by a State fund or other State assurance for which a petition has been submitted will be deemed in compliance with Subpart I for the amount and types of costs covered by the mechanism. This provision is based on §264.150 for financial responsibility under the Subtitle C rules. The Agency requests comment on the desirability of this provision.

Section 280.102(d) of the proposed rule requires that within 60 days after a State fund or other State assurance is determined by EPA to be an acceptable mechanism, the State must provide to each owner or operator for which it is assuming financial responsibility a letter or certificate describing the nature of the State's assumption of responsibility. The letter or certificate from the State must include, or have attached to it, the following information: the facility's name and address and the amount of funds for corrective action and/or for compensating third parties that is assured by the State. As required by §280.107(b)(5), the owner or operator must maintain the letter or certificate on file as proof of financial responsibility. In addition, in the event a State becomes aware that its EPA-approved fund or other State assurance will not be able to provide financial assurance to the owners and operators to whom it applied, the person within the State government who is designated to authorize State fund expenditures or to administer the financial responsibility program must notify the Regional Administrator of such incapacity. See §280.110(d).

Although not included in today's proposal, except to the extent that they may qualify as State-required mechanisms, local funds and other local government assurances might be established to demonstrate financial responsibility. The criteria by which the Regional Administrator might evaluate a local assurance could be the same as that used for evaluating State assurances. The Agency recognizes that it may be desirable to differentiate between the requirements for State funds and those for local funds. For this reason, the Agency requests comments and any further information on topics related to local funds. For example:

- Do any local funds exist currently? If so, what types of costs do they cover?
- Would the proposed regulations encourage the formation of any local funds?
- What criteria should be used to evaluate their acceptability under the Federal-program?

M. Standby Trust Fund (§280.103)

1. Features of Mechanism. Under §280.103 of the proposed rule the standby trust fund is the depository mechanism that must be established when an owner or operator obtains one of the following financial assurance instruments: guarantee, indemnity contract, surety bond, or letter of credit. Funds drawn under any of the instruments listed, pursuant to the
Regional Administrator's instruction, must be deposited directly into the standby trust fund by the institution making the payment. The Agency is proposing the reservation because, without such a depository mechanism, any funds drawn under those instruments that are payable to the Regional Administrator would have to be paid into the U.S. Treasury and could not be used specifically to pay for the UST corrective action or third-party liability claims for which the funds were intended (see 31 U.S.C. 3302). A standby trust fund must be established when the instrument is established so that it will be ready to accept full payment if the instrument is cancelled and the owner or operator has not obtained alternate assurance.

The rule proposes that the trustee must have the authority to act as a trustee and its trust operations must be regulated and examined by a Federal or State agency. This proposed trustee qualification requirement is the same as the trustee qualification requirement under the Subtitle C regulations. If the trust operations are not regulated and examined by a Federal agency, the trust operations must be regulated and examined by a State agency in each State in which a standby trust fund is established under this Subpart.

While the standby trust fund must be established at the same time the owner or operator obtains one of the mechanisms listed above, it will not be funded unless or until the Regional Administrator determines that the failure of the owner or operator to take corrective action and/or compensate third parties has triggered payment or performance under one of the mechanisms. (See section III.R of this preamble and proposed § 280.103(b).)

The wording of the standby trust agreement must be identical to the wording provided by § 280.103(b). Requiring specific wording in the agreement minimizes the administrative burden on the Regional Administrator by eliminating case-by-case review of standby trust agreements and provides owners and operators with the assurance that the agreements as worded will satisfy the regulatory requirements. The agreement specified by § 280.103(b) describes requirements that the trustee of a standby trust must fulfill. For example, the agreement (1) describes the parameters within which the trustee may manage or invest the funds in the standby trust by referring to a "prudent person" standard and the types of accounts in which trust funds can be held; (2) lists the expressed powers and discretions conferred upon the trustee, such as to sell or otherwise dispose of trust property; (3) requires that the standby trust shall be irrevocable; and (4) provides that the trustee is immune from incurring personal liability for actions taken to administer the fund. If the trustee is subject to a personal liability claim related to his actions as trustee, the trustee shall be indemnified by the grantor. The Agency solicits comments on the wording of the standby trust agreement proposed by today's rule.

Under the proposal, the Regional Administrator will instruct the trustee to refund the balance of the standby trust to the owner or operator when the Regional Administrator determines that no additional corrective action costs or third-party liability claims will occur with respect to the release for which the funds were deposited initially. The Agency may consider the following factors when making this determination:

- Whether closure and, if required, corrective action have been completed as required by Subpart F of Part 280;
- Whether all known third-party liability claims have been settled or adjudicated and satisfied; and
- Whether additional third-party claims are likely to arise.

The Agency requests suggestions of other factors that the Regional Administrator should consider in determining whether additional costs will arise as a result of a release covered by a standby trust fund.

2. Applicability to UST Requirements. The Subtitle I standby trust fund requirements and required wording of the agreement are similar to the standby trust fund requirements of the Subtitle C closure and post-closure care regulations. The Subtitle C regulations require that a standby trust fund be established when an owner or operator obtains a surety bond or a letter of credit. The wording of the Subtitle I standby trust fund agreement is generally consistent with the wording of the Subtitle C trust agreement in 40 CFR 284.151(a).

3. Timing. The standby trusts established for UST financial responsibility are less likely to be funded than the standby trust funds used for financial responsibility of closure and post-closure care at RCRA Subtitle C facilities. This deference arises because it is not certain that a UST release will occur, whereas closure is required at all RCRA treatment, storage, and disposal facilities (and post-closure care at all land disposal facilities). The Agency therefore considered allowing standby trust funds under the Subtitle I program to be established at the time they were needed as a depository for payments from a guarantor, indemnitor, surety, or bank. However, this option was rejected because the Agency believes that the immediate availability of the depository mechanism, if and when needed, is not certain.

The Agency also considered the costs related to establishing and maintaining a standby trust fund. The primary costs are the costs of managing the funds; other relatively minor costs include the administrative fee charged to establish the trust fund and fixed fees for simply maintaining the account. Because the costs of establishing a standby trust at the time the operator is established will be minimal, since there will be no funds in the trust, the Agency does not believe that the requirement to establish the standby trust fund at the time the instrument is established will be particularly burdensome to UST owners or operators.

N. Substitution of Financial Assurance Mechanisms by an Owner or Operator (§ 280.104)

An owner or operator may substitute alternate financial assurance as specified in § 280.104 of today's rule, provided that at all times he maintains an effective financial assurance mechanism or combination of mechanisms that satisfy the requirements of this subpart. After obtaining alternate financial assurance, the owner or operator may cancel a financial assurance mechanism by providing notice to the provider of financial assurance. Continuous coverage is necessary for ensuring the availability of funds at all times for corrective action and third-party liability claims, should a release occur from an UST containing petroleum.

The Agency is not proposing to require that the owner or operator receive prior written consent from the Regional Administrator when substituting alternate financial assurance mechanisms. This feature is consistent with the Agency's general approach in limiting UST reporting requirements because of the large numbers of owners or operators subject to these requirements. However, the Agency is proposing to require that owners or operators believe that the continuous financial assurance and maintain evidence of any substitutions. Specifically, owners and operators will be required to maintain records of changes in financial assurance mechanisms one year beyond the operating life of the facility. In addition, the Agency is proposing to require
reporting by the owner or operator under limited circumstances, as discussed below, including failure to obtain alternate coverage upon incapacity of, or cancellation by, the provider of assurance. The Agency requests comments on whether the requirements to maintain proof of substitutions and report evidence of financial responsibility under certain conditions provide adequate safeguards against owners or operators cancelling a financial assurance mechanism before receiving alternate assurance.

O. Cancellation or Nonrenewal by a Provider of Financial Assurance (§ 280.105)

In § 280.105 of today’s rule, the Agency is proposing cancellation provisions applicable to all mechanisms except the financial test of self-insurance. In proposing cancellation provisions, the Agency wished to avoid the situation whereby a provider of financial assurance cancels a mechanism because a release from an UST has been identified, thereby leaving an owner or operator without coverage when it is most needed. Therefore, under the proposed cancellation provisions, a provider of financial assurance may cancel, refuse to renew, or otherwise terminate an instrument, only if the provider first notifies the owner or operator at least 120 days in advance. If an alternate mechanism is not obtained within 60 days after the notice is received, the owner or operator must notify the Agency of such failure to maintain evidence of the existing financial responsibility, the name and address of the provider of financial assurance, and the date of cancellation. An owner or operator will be out of compliance with the financial responsibility requirements if he does not obtain alternate coverage before the cancellation is effective. (Inability to obtain alternate coverage may make an owner or operator eligible for a suspension of enforcement.)

The Agency considered an alternative cancellation procedure that would require the provider of financial assurance to notify the Agency at the same time that it notifies the owner or operator of termination. However, the Agency rejected this approach because the proposed 60-day notice provides adequate time for the Agency to respond to the pending termination as circumstances require.

In cases where the owner or operator obtains an alternate mechanism within 60 days after receiving a notice of cancellation, requiring notification would increase only the reporting burden, not the degree of protection of human health and the environment. By contrast, if an owner or operator does not obtain an alternate mechanism within 60 days by notifying the EPA will alert the Agency to the possibility that, in another 60 days, the existing financial assurance mechanism will be terminated and therefore unable to provide funds. At this point, the Agency will have the opportunity to inspect the affected tanks to determine if any releases have occurred. By making this determination before the existing mechanism expires, the Agency can then assure that the still viable mechanism may be drawn upon to provide any necessary funds.

Under today’s proposal, financial assurance mechanisms are drawn on only if the Regional Administrator determines or suspects that there is a release. As a result, corrective action or third-party liability claims may go unfunded after an owner or operator receives a cancellation notice. For example, if an owner or operator fails to obtain alternate assurance after receiving notification that the bank intends to draw his letter of credit in 120 days, but no release has been detected or suspected, the Agency may not require the letter-of-credit issuer to fund the standby trust. If after 120 days, however, a release occurs at one of the facilities lacking coverage, the Agency may not be able to obtain from the owner or operator the funds necessary to address the release.

Requiring that funds be drawn on an existing mechanism in the event that an owner or operator receives a notice of cancellation and is unable to provide alternate assurance regardless of the existence of a release could avoid this potential for unfunded claims. Under the Subtitle C program of closure and post-closure financial responsibility, the Agency does require funding of the standby trust if the owner or operator receives a cancellation notice and is unable to get an alternate mechanism, partly because closure and post-closure costs will have to be paid for all facilities whereas an UST release may not occur.

The Agency nevertheless rejected this approach for UST financial responsibility, because it believes that only in rare circumstances will UST releases be discovered after cancellation of a mechanism, thus necessitating corrective action or compensation whose costs the owner or operator cannot pay. Therefore, in most cases, an automatic drawing of funds in the event the owner or operator receives a cancellation notice and is unable to obtain alternate assurance will be unnecessary. In addition, drawing funds unnecessarily could cause financial hardship to small firms whose coverage providers will seek reimbursement of the drawn funds from the owner or operator.

However, given this potential for unfunded corrective action and liability claims, the Agency invites comments on the proposed cancellation procedures and the extent to which they ensure adequate financial protection. Comments are requested specifically on the following issues: (1) Who should notify the Regional Administrator when assurance is cancelled or not renewed or an owner or operator fails to obtain alternate assurance after receiving a notice of termination? (2) Under what circumstances should funds be drawn from a mechanism if an owner or operator fails to obtain alternate assurance? (3) What amount of funds, if any, should be drawn from a mechanism if a release has been detected or suspected? (4) What amount of funds, if any, should be drawn from a mechanism if a release has been detected or suspected? (5) How long should the period of cancellation be?

On this last point, the Agency has considered requiring providers of financial responsibility instruments to notify owners or operators 180 days in advance of their intention to cancel or terminate the instrument. Under such a provision, owners and operators would have 90 days from the time they received a cancellation notice to obtain alternate assurance; if they failed to do so, they would have to notify EPA by day 60, leaving the Agency 120 days before cancellation of the instrument to draw on the instrument, if necessary. The 120-day period during which EPA could draw on the mechanism would, relative to the 120-day cancellation provision being proposed, allow more time for EPA or the implementing agency to inspect the UST facility to determine if a release had occurred.

P. Reporting by Owner or Operator (§ 280.106)

Under § 280.107 of today’s proposed rule, an owner or operator of a facility is required to keep evidence of financial responsibility at the UST site or business place of business. Section III.Q of this preamble describes the nature of the records that the owner or operator must maintain. In addition to the recordkeeping requirements, an owner or operator must submit the appropriate documentation of current financial responsibility to the Regional...
Administrator in the following circumstances:

(1) When the owner or operator notifies the Regional Administrator of the existence of a new petroleum underground storage tank under § 280.22;

(2) Within 30 days after the owner or operator has a known or suspected release from a petroleum underground storage tank required to be reported under § 280.74;

(3) If the owner or operator fails to obtain alternate coverage as required by this subpart within 30 days after the owner or operator receives notice of:
   • Commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S.Code, naming a provider of financial assurance as a debtor.
   • Suspension or revocation of the authority of a provider of financial assurance to issue a financial assurance mechanism;
   • Failure of a guarantor or indemnitor to meet the requirements of the financial test, or
   • Other incapacity of a provider of financial assurance;

(4) If an owner or operator is unable to obtain alternate assurance within 60 days after receiving a notice of termination of a mechanism, as required by § 280.105(b); or

(5) If the owner or operator using the financial test fails to meet the requirements of the test, as required by § 280.94.

In addition, the Regional Administrator has the authority to require that owners or operators submit at any time documentation of financial assurance or other relevant information such as insurance policies or financial statements.

These provisions differ substantially from the reporting requirements of RCRA Subtitle C financial responsibility requirements. Under Subpart H of 40 CFR Parts 294 and 285, an owner or operator must submit evidence of financial assurance to EPA on an ongoing basis. For new facilities, an owner or operator must submit evidence of financial assurance at least 60 days prior to the initial receipt of hazardous waste. Evidence of financial responsibility then is maintained with the Regional Administrator throughout the operating life of the facility and, in the case of financial responsibility for post-closure care, throughout the post-closure care period. The following events could trigger the submission of such evidence during the period of required demonstration: changes in cost estimates associated with closure and post-closure care; updated coverage to adjust for inflation; annual financial test submissions; and substitution of a different financial assurance mechanism.

The Agency considered similar requirements for UST financial responsibility out of concern that not requiring ongoing reporting of financial assurance could jeopardize the availability of funds for corrective action or third-party claims when needed. While EPA recognizes that requiring owners and operators to submit evidence of financial responsibility may improve overall compliance, the Agency believes that there are a number of reasons why reporting requirements should not and need not be so stringent.

First, the regulated UST community, measured in numbers either of firms or facilities, is very large. The requirements of today's rule will apply to an estimated 1.4 million USTs located at over 500,000 facilities. Receiving and processing financial assurance certifications on a regular basis from all UST owners or operators could place overwhelming administrative burdens on Regional offices and States.

Second, the Agency believes that requiring the submission of financial responsibility evidence only in certain circumstances is reasonable because other types of notification are already required at these times under the regulations and the new tank notification requirements under section 9002(a) of Subtitle I. Specifically, the proposed UST technical standards published elsewhere in today's Federal Register require operators to report releases of petroleum to the Regional Administrator. In addition, owners or operators who bring into use a new tank after the initial notification period (i.e., May 6, 1986) must notify the appropriate State or EPA of the existence, age, size, type, location, and uses of the new tank. Including information regarding financial assurance to the reports, when they are submitted, will not significantly add to their cost.

The Agency also believes that the absence of regular reporting from all UST owners or operators will not necessarily result in a high rate of non-compliance. To increase awareness of and compliance with the UST rules, EPA is preparing an extensive public outreach program aimed at providing UST owners and operators with information on all UST requirements, including financial responsibility, before the requirements become effective. Moreover, many UST owners and operators are already obtaining insurance to limit their exposure to future liability due to UST releases. (See Chapter 7 of the supporting document in the docket for today's proposal.) In addition, provisions in the Superfund Amendments and Reauthorization Act of 1986 (SARA) for the Leaking UST Trust Fund and suspension of enforcement, discussed in more detail below, create further incentives for owners or operators to comply with the financial responsibility requirements.

Except in limited situations, the Leaking UST Trust Fund may be used to pay for costs in excess of the required amount of financial responsibility only if the owner or operator has maintained evidence of financial responsibility. Furthermore, in cases where EPA seeks to recover costs for an Agency response to an imminent threat to public health, full costs will be sought from an owner or operator who has not maintained financial responsibility (section 9003(h)(11)). In addition, the enforcement suspension provisions create incentives for owners or operators to demonstrate to the Agency that they have attempted to comply with the financial responsibility regulations. Because these provisions encourage compliance, there is less need for strict reporting requirements.

The Agency considered other reporting options but chose not to incorporate them into the proposed approach at the current time. These two options were among those considered:

• A requirement for submitting a certification of financial responsibility. This certification would require that the owner or operator submit to the Agency a postcard that lists the facility(ies) where USTs are located, the type of financial assurance used, the issuer of the financial assurance mechanism, and the mechanism number, where appropriate.

• A requirement that information on specific financial assurance mechanisms be submitted to the Agency. Submissions would include more complete information on the mechanism, including its term and amount.

These options would entail the reporting of financial assurance by all owners and operators for all their petroleum underground storage tanks. Although the Agency has decided against full reporting for the reasons discussed above, the full reporting options do have distinct advantages. First, full reporting would enable the Agency to target enforcement efforts toward owners or operators who fail to submit evidence of financial responsibility. These owners or operators may also be out of compliance with technical standards for USTs containing petroleum.
Second, the proposed rule requires owners or operators of new tanks to provide evidence of financial responsibility when they comply with the new tank notification requirements. Documentation of financial responsibility may be even more useful for existing tanks, which may have a higher release potential than new tanks. In addition, more stringent reporting requirements may not necessarily be burdensome for UST owners and operators. Under the two options described above, all UST owners or operators submit evidence of financial assurance only at the outset of the regulations, unless a release occurred or a mechanism was cancelled or not renewed. Furthermore, the burden of full reporting could be reduced by allowing providers, such as insurers, to submit evidence of financial assurance to EPA on behalf of insured owners and operators.

Finally, the alternatives for full reporting have specific advantages. The alternative of reporting information on each specific mechanism would provide the Agency with the most complete information for monitoring compliance. Moreover, in the case of some mechanisms—namely, letters of credit and surety bonds—it may be necessary or desirable to have these mechanisms submitted directly to the Agency. The contractual features of these mechanisms may be such that the implementing agency must know their exact wording, as well as the identity of the third-party issuer, in order to draw upon them. Furthermore, at the time of a release, owners or operators may have a substantial incentive not to submit the mechanisms, since this may mean that they will bear the costs of the funds drawn on the mechanisms.

The alternative of reporting by postcard has the advantage of lower reporting costs for owners and operators and lower administrative burden to the Agency. The disadvantage, however, is that the amount of information that can fit on a postcard may not be adequate for compliance monitoring purposes. The Agency has decided nevertheless to propose less stringent reporting requirements. It should be noted that under this proposed approach, while owners or operators will not be required to submit regular reports, the Agency nevertheless has the option of requesting copies of the mechanisms at any time. The Agency is requesting comments on the proposed option as well as on those options that the Agency considered but is not proposing. In particular, the Agency would welcome suggestions of other options, not considered, that would ensure that funds will be available when needed but, at the same time, avoid unnecessary reporting burdens. The Agency will review such comments in deciding whether to revise the reporting procedures in the final rule.

Q. Recordkeeping ($280.107)

Owners or operators must maintain evidence of all financial assurance mechanisms used to demonstrate financial responsibility under this subpart until one year after closure or one year after the completion of closure and corrective action. An owner or operator must maintain such evidence at the UST site or the place of business of the owner or operator. He must maintain the following types of evidence for mechanisms used to demonstrate financial responsibility under Subpart I:

(1) Copies of assurance mechanisms specified in Sections 280.94-280.100, worded as specified.

(2) Letters from the chief financial officer supporting the use of financial tests, guarantees, or indemnity contracts based on year-end financial statements for the last completed fiscal year. Such evidence must be on file no later than 90 days after the close of each fiscal year.

(3) Originally signed duplicates of the standby trust funds worded as specified in § 280.103(b) for guarantees, indemnity contracts, surety bonds, or letters of credit.

(4) Originally signed duplicates of the insurance policies or risk retention group coverage policies with the endorsements or certificates of insurance and any amendments.

(5) Copies of letters or certificates from States regarding coverage by State funds or other State assurances.

The proposed rules also require the owner or operator to maintain a certification that the financial assurance mechanism used to demonstrate financial responsibility is in compliance with the requirements of the rule. Because EPA is not receiving financial responsibility reports on a regular basis, the Agency believes that requiring the additional certification will provide additional incentive for owners or operators to comply with the regulations at all times. Furthermore, the certification requirement will be useful in Agency enforcement efforts.


Financial assurance mechanisms that are provided to the owner or operator by other parties, such as guarantees, indemnity contracts, surety bonds, and letters of credit, require action by EPA to initiate payment. Because third-party liability claims may be contested by an UST owner or operator, special procedures to draw on the financial assurance mechanisms are necessary. These special procedures are designed to minimize the administrative burden of processing the claims, while ensuring that valid claims are paid without unnecessary delay or difficulty.

1. Corrective Action Claims. When an UST owner or operator notifies the Regional Administrator of a release in accordance with Subpart F of 40 CFR Part 280 Section 280.50—Notification Requirements (being proposed elsewhere in today's Federal Register), the owner or operator must provide the required evidence of financial assurance within 30 days. Once EPA possesses the evidence of the assurance mechanism, under § 280.108(a) of the proposed rule, it will be able to prepare and submit the appropriate instructions to the provider of financial assurance to fund the standby trust, if necessary. If the owner or operator fails to pay the costs of corrective action, the Regional Administrator can direct the provider to pay. For example, if an owner or operator uses a letter of credit as its financial assurance mechanism and submits an originally signed duplicate of the letter in the event of a release, EPA would be able to prepare an appropriate draft to order the issuer to fund the standby trust.

2. Third-Party Compensation Claims. Third-party compensation claims must be handled differently from corrective action claims because the UST owner or operator may contest a third-party compensation claim as invalid or inaccurate. Without a special procedure to evaluate claims, the Agency may be placed in the role of a claims adjuster. The Agency is proposing in § 280.108(b) a procedure that will minimize the administrative burden on the Agency by requiring the owner or operator and the third-party claimant to submit a document that certifies the validity and amount of the claim. The certification of the claim must be signed by attorneys representing each party. The certification is designed to allow an owner or operator to settle a claim with a third party without conceding liability in a document accessible by the public, which could be used against the owner.
or operator in future claims. The Agency solicits comments on the wording of the certification document.

The Agency's intent in requiring submission of this certification is to avoid instances in which the Agency or the provider of financial assurance will be required to settle disputes between the owner or operator and the third-party claimant. In essence, the requirement to submit the signed certification requires the parties to assure that either they agree that the claim itself as well as the amount are valid or they have settled any disputes related to the validity or amount of the claim before coming to the Agency. Although this process may result in some delay in the payment of claims, the Agency believes that potential delays will be no greater than they would if insurers were to resolve claim disputes.

Requiring signed certification by attorneys representing each party will ensure that the document is a valid verification and not a product of fraud or misrepresentation. Attorneys are subject to disciplinary rules, one of which requires that "In the case of representing a client a lawyer shall not knowingly (a) make a false statement of material fact or law to a third person"

(Rule 4.1 of the ABA Model Rules (1983)). In addition, requiring the opposing attorneys to sign the same certification provides added assurance that the parties have in fact agreed to the validity and amount of the claim. Having notarized signatures from the parties and their attorneys on one form further demonstrates their agreement to the certification.

The procedure is designed to reduce administrative burdens and to allow efficient payment of valid claims. The Agency does not expect the requirement to submit a signed and notarized certification of claim to place undue burdens on owners or operators or third-party claimants.

Alternatively, if the owner or operator and the third-party claimant cannot agree on the validity and amount of the claim, a lawsuit may be required to determine whether the claim should be paid and, if so, the amount due. In some instances, the Agency may become involved in these lawsuits as an ancillary party. When the parties cannot agree, a final judgment by the court will be submitted by the third-party claimant, if such a judgment is won, indicating that the claim should be paid. By final judgment the Agency means the final disposition of the case on its merits; thus, a decision by a court of appeals may be required in some situations.

The Agency is soliciting comments on the potential effectiveness of this procedure in avoiding situations in which EPA or the provider of financial assurance will be required to make judgments concerning the validity of claims.

3. Payout of the Funds Drawn. The Regional Administrator will draw on financial assurance mechanisms once an estimate of the cost of immediate and long-term corrective action is available. The Regional Administrator will draw on the mechanism up to the amount of the estimated corrective action costs and known or expected third-party liability claims. Section 280.106(c) of the rule proposes that in cases where the Regional Administrator determines that all costs eligible for payment, both corrective action costs and third-party liability claims, may exceed the balance in the standby trust fund and the balance of the provider's obligation under the mechanism, the Regional Administrator will instruct the trustee to pay the corrective action costs first. The purpose of giving priority to corrective action costs over third-party liability claims is to prevent further damages. Cleaning up a release as quickly as possible will minimize further threats to human health caused by the release as well as third-party liability claims. If the amount of coverage is not absorbed fully by corrective action costs, the Regional Administrator will instruct the trustee to pay third-party liability claims in the order in which the Regional Administrator receives the notices of valid claims.

5. Release from the Requirements of this Subpart (§ 280.109)

The Agency proposes in § 280.109 to provide for the release of the owner or operator from the financial responsibility requirements of this subpart one year after completion of permanent closure of the tank(s) requiring coverage as required by § 280.60, or, if corrective action is required as in Subpart F of Part 280, one year after completion of the corrective action and closure. The release provision involves some difficult issues as discussed below.

1. Need for Funds After Closure and Corrective Action. After permanent closure of a tank is completed and any necessary corrective action performed, there still exists potential for future third-party liability claims resulting from latent injures caused by releases from the tank that occurred before closure. If the owner or operator is released from financial responsibility requirements after permanent closure and corrective action have been completed, the future liability claims may not be covered by any party and may go unfunded.

2. Availability of Financial Assurance Mechanisms. Although releasing the owner or operator from these requirements only after closure and corrective action would ensure that such actions will have adequate funding, the provision may restrict the availability of mechanisms for financial assurance. For example, one rationale for terminating the Subtitle C liability coverage requirements at closure was that prolonging required coverage beyond closure would make providers unwilling to take the risk of such long-term commitments. The longer the financial responsibility requirements apply, the less likely it is that financial assurance mechanisms will be available for coverage of corrective action and liability claims.

In light of these difficulties, the Agency analyzed the following options for the release provisions:

a. Release from Requirements at Permanent Closure. This approach would provide the shortest time period for required coverage, thereby ensuring maximum availability of assurance mechanisms. The problem of future third-party liability claims, however, remains unresolved by this approach.

b. Release from Requirements for Corrective Action and Liability Coverage at Different Times. Under this approach, the owner or operator would be released from covering corrective action at the completion of such action (if it occurs after permanent closure) but would be required to continue third-party liability coverage for a period determined reasonable to ensure that future claims will be met. This approach would provide better assurance of coverage, but it may reduce the availability of financial assurance mechanisms since providers may be less willing to undertake longer-term commitments.

3. Release from Requirements One Year After Completion of Permanent Closure or One Year After Completion of Permanent Closure and Corrective Action. The Agency determined that the best option for the release provision would allow the owner or operator to be released from financial assurance one year after permanent closure or, if corrective action is needed at permanent closure, one year after corrective action and closure are complete. This approach ensures better availability of assurance mechanisms than requiring coverage for an extended period beyond permanent closure regardless of the need for corrective action. Adoption of this approach would
ensure better coverage of potential claims than would the approach that releases the owner/operator from requirements at permanent closure, although it may not cover future third-party liability claims more than one year after corrective action is completed. The option selected attempts to optimize availability of mechanisms and levels of coverage, rather than maximize one or the other.

The Agency requests comments and suggestions regarding these and any other potential alternatives for releasing owners or operators from Subpart I requirements.

The Agency also considered allowing an owner or operator to be released from the requirements of Subpart I only after the applicable statute of limitations for potential third-party liability actions had run out. The Agency decided against this approach because it may be very difficult to determine when the statute of limitations period begins. Under applicable State laws (i.e., whether at the time of a release, at the time of exposure, or at other times) Furthermore, such an approach may require coverage for many years because, in many cases, the statutory period will not commence until the injury has become manifest, which, for certain diseases with long latency periods, may be several decades after exposure to petroleum.

The proposal also authorizes the Regional Administrator to notify the owner or operator that he is not being released from financial responsibility requirements because the Agency has reason to believe that a release from a tank has not been addressed properly. This provision gives the Agency the opportunity to conduct an investigation prior to releasing the owner or operator from financial responsibility obligations and ensures that any release undetected by the owner or operator will be covered by financial assurance.

Any provision for release from financial responsibility requirements will be affected by the development of regulations for corrective action for underground storage tanks containing petroleum. In accordance with the regulations, release of the owner or operator from financial responsibility will not take place until one year after completion of corrective action in accordance with the approved corrective action plan.

T. Bankruptcy or Other Incapacity of Owner or Operator or Provider of Financial Assurance (§ 280.110)

The proposed rule requires that any owner or operator named as a debtor in voluntary or involuntary bankruptcy proceedings (under Title 11 of the U.S. Code) notify the Regional Administrator within 10 days after commencement of such proceeding. In addition, a guarantor or indemnitor must notify the owner or operator by certified mail within 10 days after commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy) of the U.S. Code that names such guarantor or indemnitor as debtor. The proposed rule stipulates, furthermore, that any owner or operator who obtained financial responsibility using a mechanism other than the financial test of self-insurance will be deemed to be without the required financial assurance in the event of a bankruptcy or incapacity of its provider of financial assurance, or a suspension or revocation of the authority of a provider to issue a guarantee, indemnity contract, surety bond, insurance policy, risk retention group coverage policy, letter of credit, or State-required mechanism. Finally, proposed § 280.110 requires States to notify the Regional Administrator and owners and operators covered by a State fund or other State assurance within 30 days after the assurance mechanism becomes incapable of covering assured costs. The proposed rule adopts the provision in Subtitle C rules for the incapacity of owners or operators, guarantors, or financial institutions (see Sections 264.148 and 265.148), but amends the language to make it more applicable to the requirements for Subtitle I financial responsibility.

As is the case with the Subtitle C rules, the proposed rules do not require providers of financial assurance to notify EPA or covered owners or operators of the provider's incapacity or revocation of authority in all cases. For example, banks and insurance companies are generally not subject to the Bankruptcy Code (see 11 U.S.C. 106(b)), yet are not required to notify owners or operators if they become insolvent. In addition, providers other than States are not required to provide notice of the revocation of their authority. In some of these instances, an assurance mechanism may not provide adequate assurance. Thus, the Agency is concerned about whether owners or operators will become aware of such problems soon enough to enable them to obtain alternate coverage before their present coverage is terminated. The Agency requests comments on this problem.

U. Suspension of Enforcement (§ 280.111)

RCRA section 9003(d)(5)(D) authorizes the Administrator to suspend enforcement of the financial responsibility requirements for particular classes or categories of USTs containing hazardous substances or located in particular States. To suspend enforcement, the Administrator must determine (1) that methods of financial responsibility are not generally available for USTs in the class or category; and (2) that either (a) steps are being taken to establish a risk retention group for that class of tanks or (b) a State is taking steps to establish a corrective action and compensation fund under RCRA section 9004(c)(1). A suspension of enforcement may not exceed 180 days. The Administrator has the discretion to suspend enforcement for a period of less than 180 days.

After expiration of an initial suspension period, the Administrator may again suspend enforcement of the requirements, but only if either (1) "substantial progress" has been made in establishing a risk retention group or (2) the owners or operators of USTs belonging to the class or category demonstrate, and the Administrator finds, that the State is unable or unwilling to establish a corrective action and compensation fund and formation of a risk retention group is not possible. Because the Agency expects that most applicants will eventually demonstrate financial responsibility, the Agency expects that suspensions will generally not be renewed indefinitely.

The SARA Conference Report notes that the suspension procedures do not apply to a particular owner or operator who cannot get assurances, but rather to owners and operators of USTs in particular classes or categories or States (House Report 99-962, 99th Congress, 2nd Session, p. 264). In addition, the Agency interprets the statute to mean that enforcement may be suspended only if both the owners and the operators of USTs of a particular class or category are unable to obtain financial assurance.

The Agency is proposing procedures and criteria to review requests for suspension of enforcement of the Subpart I financial responsibility requirements. Suspensions may allow time for owners and operators of USTs of particular classes or categories or located in particular States to obtain coverage for corrective action and third-party compensation costs. Because some owners or operators of certain classes or categories of USTs may find that financial assurance mechanisms are not generally available upon the effective date of the rule, suspensions may be necessary to allow these owners and operators to comply with the
requirements through the formation of risk retention groups or the establishment of State funds.

In developing the proposed suspension of enforcement rules, the Agency faced several difficulties. It is difficult to gauge the number and type of petroleum-containing USTs whose owners and operators will be unable to obtain insurance or another form of financial assurance and who will thus seek suspension of enforcement. As a result, it is uncertain whether the suspension procedures should be designed to handle dozens or thousands of applications. In addition, EPA is constrained by the terms of SARA. For example, the Agency may not grant a suspension or renewal of suspension that exceeds 180 days. Thus, procedures for considering requests for suspension renewals should allow for determinations to be made prior to the expiration of the 180-day period.

To address these difficulties, the Agency is proposing relatively detailed procedures and criteria, which should enable EPA to grant or deny suspension requests in a timely fashion. The Agency requests comment on all aspects of the proposed suspension of enforcement procedures and on any alternative procedures.

This section of the preamble is organized into seven parts, which address the following issues: (1) The proposed requirements concerning what will be considered to constitute a class of USTs; (2) the proposed criteria for demonstrating that financial assurance is not generally available; (3) the evidence that must be maintained by class members; (4) how the Agency plans to judge whether the steps being taken to form a risk retention group or to establish a State fund are sufficient to warrant the granting of an initial suspension; (5) the proposed procedures for submitting and reviewing applications for an initial suspension; (6) the proposed criteria for renewing a suspension; and (7) the proposed renewal procedures.

1. Eligible Applicants. RCRA section 906(d)(5)(D) authorizes the Administrator to suspend enforcement of the financial responsibility rules “for a particular class or category of underground storage tanks or in a particular State” if certain requirements are met. Two broad approaches could be used to create classes for purposes of suspension. First, as proposed in today’s rule, the Agency could rely on owners and operators for whom financial assurance is not generally available to form classes and request suspension of enforcement. Second, the Agency could, in advance of suspension requests, define classes of USTs for which financial assurance is assumed to be not generally available and subsequently accept petitions from owners and operators who fall into such classes or from representatives of such owners and operators. Under this approach, owners and operators could also form their own classes, separate from those defined by EPA. The Agency requests comment on both of these approaches, as well as suggestions for alternative approaches.

The Agency has not proposed this approach for several reasons, however, including the following:

- The classes established by the Agency may not correspond with groupings of owners and operators necessary to establish viable risk retention groups. Thus, EPA-defined classes might restrain the formation of viable groups.
- Providers of financial assurance, including insurers, may be unwilling to describe the owners, operators, and tanks that they are willing to cover in a manner that enables EPA to define broad classes for which assurance is generally not available.
- EPA would be required to monitor the availability of financial assurance and adjust its definitions of classes, which could cause confusion within the regulated community.
- Defining classes that are not overinclusive (i.e., include owners or operators able to obtain assurance) might be difficult to avoid because the availability of assurance depends on many factors, which may include the nature of the business of the owner or operator (e.g., petroleum marketer, farmer), the condition of the tank, the financial characteristics of the owner and operator, and the willingness of firms that are related to, or have substantial business relationships with, the owner or operator to issue a guarantee or indemnity.

Second, the Agency’s burden of administering the suspension of enforcement process might be less, relative to that under the first approach, particularly in the period immediately after the rules become effective. Although EPA would be required to determine what financial assurance is available and to whom and publish its findings, the Agency could conduct its investigations before requests for suspensions are received and thereby improve its ability to implement the initial suspension procedures in a timely manner.

The Agency has not proposed this approach for several reasons, however, including the following:

- The classes established by the Agency may not correspond with groupings of owners and operators necessary to establish viable risk retention groups. Thus, EPA-defined classes might restrain the formation of viable groups.
- Providers of financial assurance, including insurers, may be unwilling to describe the owners, operators, and tanks that they are willing to cover in a manner that enables EPA to define broad classes for which assurance is generally not available.
- EPA would be required to monitor the availability of financial assurance and adjust its definitions of classes, which could cause confusion within the regulated community.
- Defining classes that are not overinclusive (i.e., include owners or operators able to obtain assurance) might be difficult to avoid because the availability of assurance depends on many factors, which may include the nature of the business of the owner or operator (e.g., petroleum marketer, farmer), the condition of the tank, the financial characteristics of the owner and operator, and the willingness of firms that are related to, or have substantial business relationships with, the owner or operator to issue a guarantee or indemnity.

The Agency requests comments on this approach, including on what classes might be feasible for EPA to define.
must find "that methods of financial responsibility satisfying the requirements of this subsection [subsection 9003(d)] are not generally available for underground storage tanks in that class or category. This section of the preamble discusses the criteria that the Agency will use in judging the availability of financial assurance and the methods by which class members must demonstrate their inability to obtain financial assurance.


Congress did not specify the conditions under which methods of financial assurance are not generally available. Under the rule proposed today, suspension of enforcement is available only if none of the mechanisms described in Subpart I are generally available to the owners or operators in a class. In addition, suspension will be available for only that portion of the required amount and that type of financial assurance that is not generally available to a class. For example, if assurance is available to cover corrective action costs but not to cover the costs of third-party compensation, a suspension would be available only for assurance of third-party compensation. Similarly, if some coverage is available for a class, but not in the amounts required by § 280.92, a suspension may be available for the required amount of coverage in excess of the available coverage.

The Agency will not consider financial assurance mechanisms to be generally unavailable in the following situations:

* The owner or operator is not able to obtain financial assurance because he fails to meet the standard underwriting practices of insurers offering coverage acceptable under § 280.97 (e.g., replacing old tanks, conducting a risk assessment); and
* The owner or operator does not certify compliance with all applicable requirements of Part 280 or with an enforceable compliance schedule.

The Agency proposes to consider cost when determining whether a method of financial assurance is generally unavailable. For example, even though a surety company is willing to sell a surety bond to owners or operators who can post the required amount of collateral, surety bonds would not be considered available to owners and operators who lack the financial resources to post sufficient collateral. However, in evaluating cost, the Agency proposes to exclude the costs of satisfying preconditions for coverage, such as risk assessments, installing leak detection equipment, or installing new tanks.

b. Procedures for Demonstrating Unavailability. Under the procedures proposed today, the Agency requires that written documentation of the general unavailability of financial assurance be submitted on behalf of the entire class, by groups within the class, or by each individual owner and operator in the class. For example, a letter from an insurance company stating that the insurer will not cover losses to any individual member of the group identified in the letter could be used in lieu of letters from the insurer to individual members of the class.

b. Procedures for Demonstrating Unavailability. Under the procedures proposed today, the Agency requires that written documentation of the general unavailability of financial assurance be submitted on behalf of the entire class, by groups within the class, or by each individual owner and operator in the class. For example, a letter from an insurance company stating that the insurer will not cover losses to any individual member of the group identified in the letter could be used in lieu of letters from the insurer to individual members of the class.

b. Procedures for Demonstrating Unavailability. Under the procedures proposed today, the Agency requires that written documentation of the general unavailability of financial assurance be submitted on behalf of the entire class, by groups within the class, or by each individual owner and operator in the class. For example, a letter from an insurance company stating that the insurer will not cover losses to any individual member of the group identified in the letter could be used in lieu of letters from the insurer to individual members of the class.
Agency proposes to require each proposed methods for demonstrating the mechanism that EPA has already determined meets the requirements of § 280.101. An owner or operator of tanks located in that State may demonstrate the unavailability of this mechanism by maintaining letters or other proof of denial of coverage from several qualified providers of financial assurance who are known to offer the applicable coverage. In many instances where a State-required mechanism is similar to a Federally required mechanism (e.g., both are insurance policies), the same evidence may be used to demonstrate the unavailability of both mechanisms.

The Agency requests comments on the proposed methods for demonstrating the unavailability of coverage and suggestions for any alternative approaches.

3. Recordkeeping Requirements. The Agency proposes to require each member of a class attempting to form a risk retention group to maintain the following written documentation:
1. Proof that the owner and operator are members of a class applying for suspension of enforcement;
2. Proof that the owner and operator are unable to obtain financial assurance (which may include class letters attesting to the unavailability of assurance); and
3. Proof that the owner and operator are part of an association attempting to form a risk retention group.

Similarly, each member of a class in a State that is taking steps to establish a State fund satisfying the requirements of § 280.102 must maintain the following written documentation:
1. Proof that the owner and operator are members of a class applying for suspension of enforcement; and
2. Proof that the owner and operator are unable to obtain financial assurance (which may include class letters attesting to the unavailability of assurance).

This documentation must be maintained either at the owner’s or operator’s place of business or at the UST site(s). The documentation must be maintained by the owner or operator and released from the requirements of this subpart under § 280.109.

This documentation is necessary for the Agency to enforce the regulations. Each member of the class must maintain such evidence, even if the class representative, on behalf of the entire class, demonstrates that financial assurance is generally unavailable to the class.

4. Additional Criteria for Obtaining Initial Suspension. To be eligible for an initial suspension an applicant must demonstrate not only that financial assurance is generally not available, but also that steps are being taken to form a risk retention group or to establish a State fund. This section discusses how a risk retention group is established and what steps the Agency proposes to require that a class take towards forming such a group or that a State take in establishing a State fund before an initial suspension can be granted.

a. Forming a Risk Retention Group. A risk retention group is a corporation or other association whose primary activity is to assume and spread the liability exposure of its group members. Under the Risk Retention Act, as amended, the procedures for establishing a risk retention group generally include:
1. Soliciting membership. In general, the more members there are, the further the risks can be spread, and the lower each member’s capital contribution will be.
2. Conducting actuarial and risk analyses. The actuarial analysis estimates the capitalization requirements of the group and the risk analysis determines insurance premiums for each member.
3. Raising capital. The risk retention group may raise the needed capital through membership contributions only and incorporate as a mutual risk retention group, or it may also raise money through a stock offering and incorporate as a stock-owned group. In either case, the risk retention group may seek reinsurance, which would reduce its capitalization requirements. This is the most difficult and time-consuming step.
4. Developing an operating plan. The operating plan includes the types of coverage, deductibles, coverage levels, rates, and rating classification systems for each line of insurance the group intends to offer. Before beginning operations, the operating plan must be submitted to the insurance commission in each State where the group intends to do business.
5. Obtaining a charter and license as a liability insurance company under the laws of a State and obtaining authorization to engage in the business of insurance under the laws of such State.

b. Risk Retention Group Formation Steps Necessary to Obtain Suspension.

The Agency proposes to require that an applicant class seeking an initial suspension submit evidence that:
• the class has formed an association;
• each member in the class has made a binding financial commitment of at least $2,000 per year to the association (e.g., payment of dues); and
• the association is undertaking actuarial and risk analyses to determine its capitalization requirements and the potential premiums for risk retention group members.

To demonstrate that the class has formed an association, the class must submit its articles of incorporation, partnership agreement, or, in the case of private associations, bylaws attesting to the existence of the association.

The Agency proposes to require a demonstration of a binding financial commitment to the association (e.g., payment of dues) by its members to deter bad-faith applications for suspension of the financial responsibility requirements. Moreover, substantial financial commitments will be necessary to form an adequately capitalized risk retention group. The Agency selected the $2,000 amount as representative of the average annual UST insurance premium. The amount of the minimum required financial commitment may be revised as premium levels change over time. In many cases, owners and operators will need to contribute substantially larger sums to capitalize a group. A class may satisfy this step by submitting with the suspension application evidence of a binding financial commitment to the association. Comments are requested on whether the Agency should specify appropriate uses of funds committed to an association and on how such commitment shall be demonstrated.

The Agency also proposes to require the class to undertake actuarial analyses to estimate the risk retention group’s capitalization requirements and likely range of insurance premiums for risk retention group members. This requirement will help ensure that the class recognizes quickly the likely cost of risk retention group coverage and any need to expand the membership of a class or potential risk retention group. A class may demonstrate satisfaction of this requirement by submitting evidence of a valid contract for such analyses and/or the results of such analyses.

The Agency believes the proposed approach is feasible within the time that will be available to owners and operators and will not be burdensome to classes that actually establish risk retention groups. The Agency requests comments on the proposed approach as
well as suggestions of alternative steps that can be taken to demonstrate that progress is being made toward forming a risk retention group.

c. State Fund Formation Steps Necessary to Obtain Suspension.

Instead of showing that efforts are underway to create a risk retention group, an applicant class may be eligible for a suspension by showing that a State is taking steps to establish a State fund satisfying the requirements of § 280.102. The Agency proposes to require that an applicant class show:

* evidence that legislation establishing a State fund has recently been enacted and the State is in the process of making the Fund operational (e.g., a copy of the State law and a description of the State implementation efforts and schedule); or

* if the legislature is in session, evidence that a bill to establish a State fund has been introduced and is pending (e.g., a copy of the bill and a description of its status in the legislative process); or

* if the legislature is not in session, evidence that an appropriate State executive entity or a legislator intends to seek establishment of such a fund in the next legislative session (e.g., a schedule of plans). Evidence of such an intention must describe the scope of the desired State fund (e.g., a copy of a bill drafted for subsequent introduction) so that EPA can determine the extent to which the fund will cover the amount and scope of coverage required under § 280.92.

The Agency requests comments on this proposed approach and on alternative approaches for demonstrating progress toward establishing a State fund, including an approach that relies solely on submission of a statement by an appropriate State entity. In addition, the Agency requests comment on the desirability of requiring each member of a class seeking a suspension to set aside at least $2,000 pending creation of the State fund. It may be desirable to set aside such funds in order to:

1. demonstrate the financial commitment of each member of the applicant class to meet the financial responsibility requirements;
2. avoid giving those UST owners and operators that obtain a suspension a competitive advantage over UST owners and operators complying with the financial assurance requirements; and
3. provide funds to establish a risk retention group in the event that efforts to establish a State fund fail and a risk retention group must be formed. Moreover, requiring that owners and operators seeking to establish a State fund set aside a minimum of $2,000 would remedy the inequity of a regulation that would require only owners and operators establishing a risk retention group to set aside such funds. The Agency requests comments on whether such a requirement is desirable, how an owner or operator should demonstrate that such funds have been set aside, and what restrictions should be placed on the use of these funds.

5. Initial Suspension Application Procedures. Any class of petroleum-containing USTs may submit an application to the Agency for a 180-day suspension of the financial responsibility requirements. The Agency will not review applications from individual owners or operators applying for a suspension. As noted below, authorized States, rather than EPA, may suspend enforcement for USTs located within their jurisdiction.

After receiving an application, the Agency will review the application for completeness. (See Exhibit 5 for the initial suspension application procedures.) If additional information is necessary, the Agency will contact the representative of the class to request such information.

BILLING CODE 6560-50-M
When an application is complete, the Agency will not enforce the financial responsibility requirements for the applicant class if it appears that the applicant class has provided information indicating that a suspension may be appropriate. The Agency also considered, but rejected, the option of receiving the financial responsibility requirements during the review period because this approach would be inequitable to those classes who have made a prima facie showing that they are entitled to a suspension for the period during which the application is considered. The Agency requests comments on the proposed approach, the option rejected, and other potential alternatives.

Under today's proposed rule, after determining that an application is complete, the Agency shall publish a notice in the Federal Register announcing the Agency's interim final decision, including the notice in the Federal Register with public comments. In most cases, the Agency expects to allow the public 30 days to respond to the notice. If there is significant need for additional information or public involvement, the Agency may decide, on a case-by-case basis, to hold public hearings or extend the comment period. In most cases, the Agency expects to review all the comments and publish a final decision and a response to all comments in the Federal Register within 30 days after the close of the comment period.

If a suspension is granted, the suspension period is to begin on the date of the publication of an interim final decision approving a suspension. If, however, the interim final decision denies the petition and the final decision approves it, the suspension period begins on the date of the final decision. If enforcement is not suspended, the owners or operators in the applicant class must obtain appropriate financial assurance mechanisms. If a suspension request is denied, the Agency will explain in the Federal Register the reasons for the denial and the remedial steps that must be taken to comply with the financial responsibility requirements.

States authorized by the Agency to implement the UST program, as provided in RCRA section 9004(a), will make suspension of enforcement decisions regarding USTs located in their State. EPA will only suspend enforcement for USTs located in non-authorized States; the Agency lacks the authority to suspend enforcement of State laws. The Agency will not suspend enforcement of enforcement requirements from the Agency must consist of USTs located in non-authorized States only. If, during the application review period, a State receives authorization to implement the UST program, the class of USTs located in that authorized State will no longer be considered for suspension of enforcement by EPA.

The Agency considered, and rejected, two other options in resolving whether EPA or authorized States would be responsible for suspending enforcement for classes of USTs. Under the first option, all suspension enforcement decisions would be made by EPA. Regardless of whether members of a class are located in an authorized State. However, EPA does not have authority to suspend enforcement of financial responsibility requirements in an authorized State. The second option would require that no class be larger than a single State. This option would prevent unnecessarily the formation of multiple-state classes encompassing only non-authorized States and thereby increase the regulatory burden on both owners and operators and EPA.

The Agency considered several options in establishing the application review period. One option is to publish a notice announcing the receipt of an application, instead of a notice of the Agency's interim final decision on an application. To shorten the period of time necessary for at least an interim final decision on an application and to allow the public to comment on the Agency's reasons for approving or denying a petition before a final decision is made, the Agency rejected the former approach. The Agency also considered requiring notification to the public by means other than publication in the Federal Register (e.g., publication in State and local newspapers, letters to known interested parties). Instead of requiring an additional notice in all cases, the Agency, in consultation with States, will, on a case-by-case basis, decide whether additional notification is desirable.

The Agency requests comments on the proposed application review period, including the length of the public comment period, and on optional methods for providing for public notice and participation in the Agency's review of applications for suspension of enforcement.

6. Criteria for Renewal of Suspension. A class of USTs containing petroleum may apply for a renewal of suspension of enforcement of the financial responsibility requirements if the class can demonstrate that (1) methods of financial responsibility are still not generally available, and (2) either (a) substantial progress has been made in establishing a risk retention group or (b) the State is unable or unwilling to establish a State fund and formation of a risk retention group is not possible.

A. Unavailability of Financial Assurance. To obtain a suspension renewal, an applicant must demonstrate that financial assurance mechanisms are still not generally available. This demonstration is required because conditions in the financial assurance markets and/or the composition of the applicant class may have changed since the initial suspension or previous renewal. Therefore, States, as efforts are made to establish a viable risk retention group. The criteria and evidence for demonstrating lack of available assurance mechanisms are the same for a renewal as for the initial suspension. As noted earlier, certifications and evidence may be submitted to the Agency by the class representative rather than by each member of the class.

B. Substantial Progress in Forming a Risk Retention Group. The steps that must be taken by a class to demonstrate substantial progress in forming a risk retention group will vary from class to class, in part because the progress made by the time of the previous suspension will vary from class to class. Thus, to judge substantial progress the Agency proposes to combine standards and case-by-case evaluation. At a minimum, a class must demonstrate that it has formed an association that:

- Is taking steps toward completing actuarial and risk analyses;
- Either has sufficient membership to capitalize a risk retention group adequately or is actively seeking adequate capitalization, such as by increasing the group membership;
- Is composed of members who have each made a binding financial commitment of at least $2,000 per year to the association;
- Is taking steps toward completing an operating plan; and
- Is taking steps toward obtaining charter and license as a liability insurance company.

In addition, the Agency will review the adequacy of the steps taken by the class since the previous suspension. For example, classes eligible for a renewal must have progressed further in establishing a risk retention group than merely completing the steps identified immediately above.

However, for a class whose first suspension was based on ongoing State efforts to establish a fund and that seeks to demonstrate substantial progress in establishing a risk retention group, the Agency proposes requiring the class
applying for a renewal of suspension to demonstrate only that "steps are being taken to establish a risk retention group," as is generally required for an initial suspension. Similarly, for cases in which the composition of a class applying for renewal has changed substantially from that of the class initially receiving a suspension, the Agency will require the class to demonstrate only that steps are being taken to establish a risk retention group. In other words, this class must show that:

- The class has formed an association;
- Each member in the class has made a binding financial commitment of at least $2,000 per year to the association; and
- The association is undertaking actuarial and risk analyses to determine its capitalization requirements and the potential premiums for risk retention group members.

The Agency requests comment on the appropriateness of the proposed approach for determining substantial progress and on potential alternative approaches. The Agency also requests comments on whether the Agency should require that a class applying for a renewal of suspension of enforcement meet certain minimum standards of financial viability. The Agency is concerned that, even though substantial progress is being made to establish a risk retention group, the applicant class may be unable to establish a financially viable group. Options available to the Agency include setting net worth or capitalization requirements for classes attempting to establish risk retention groups or requiring that efforts are being made to expand the class or potential risk retention groups such that the membership is sufficient for establishing a viable risk retention group.

d. Impossibility of Forming a Risk Retention Group: To obtain an extension based on the unwillingness or inability of a State to establish a fund, an applicant must also demonstrate that formation of a risk retention group is not possible, as mandated by RCRA section 9003(d)(5)(D). The Agency proposes that such evidence must include written correspondence or memoranda documenting the steps taken in attempting to form a risk retention group. These steps may include completion of actuarial and risk analyses; efforts to obtain adequate capitalization, such as through expansion of the membership of the class or potential risk retention group; efforts to obtain reinsurance; and analyses demonstrating that a risk retention group formed by the class would not be able to obtain a State charter or license as a liability insurance company. The evidence must also address why formation of a risk retention group is not possible.

The Agency requests comments on these proposed criteria and suggestions for alternative criteria.

7. Procedures for Suspension Renewals: The procedures for reviewing applications to renew a suspension are similar to those for initial suspensions. (See Exhibit 6 for the suspension renewal procedures.) After receiving an application, the Agency will review the application for completeness. If additional information is necessary, the Agency will identify the information gaps in a letter to the applicant class.
Renewal of Suspension of Enforcement Procedures

1. Submit Renewal Application
2. Review for Completeness
3. Application Considered Complete
4. Federal Register Notice of Interim Final Decision
5. Public Comment Period Ends
6. EPA Reviews Comments
7. Federal Register Notice of Final Decision
8. 30 Days
9. Previous Suspension Ends (Automatic Suspension May Begin)
10. Deny Suspension Renewal
11. Applicant Must Obtain Assurance
12. Grant Suspension Renewal

Request for Further Data
Under today's proposed rule, after determining that an application is complete, the Agency shall publish a notice in the Federal Register announcing the Agency's interim final decision and asking for public comment. The public generally will have 30 days to respond to the notice. If there is significant need for additional information or public involvement, the Agency may decide, on a case-by-case basis, to hold public hearings, extend the comment period, or provide additional notice to the public. The Agency will review all the comments and publish a final decision and response to comments in the Federal Register.

Applications to renew suspensions must be received at least 60 days prior to the expiration of the previous suspension or 30 days after the previous final decision suspending enforcement for the class, whichever is later. If an application is received by such date and the Agency has not made an interim final decision on the renewal application before the end of the suspension period, a suspension of enforcement will automatically take effect pending review of the application. However, if an application is not received by such date, and the Agency has not made an interim final decision on the renewal application before the end of the suspension period, the class will become subject to enforcement of the financial responsibility requirements, even if the application is being reviewed by the Agency. In any case, if the Agency publishes an interim final decision to deny a renewal petition before the end of the previous suspension period, the class will be subject to enforcement when the previous suspension period ends.

In all cases, if a suspension renewal is granted, the renewal period will begin on the date of the expiration of the previous suspension period. Thus, if an initial suspension period ends and a class submits a renewal application 30 days later, the Agency may approve the application but the effective date of the suspension will be retroactive to the date of the end of the previous suspension period. If a suspension is not granted, the owners or operators in the applicant class must obtain the appropriate financial assurance mechanisms.

The Agency requests comment on these proposed suspension renewal procedures and suggestions for alternative procedures.

IV Major Differences Between This Proposal and RCRA Subtitle C Financial Responsibility Rules

A. Introduction

EPA's financial responsibility requirements for RCRA Subtitle C treatment, storage, and disposal facilities provided a model for developing the proposed Subtitle I financial responsibility rules for USTs containing petroleum. In many respects, the proposed rules are similar or identical to existing RCRA Subtitle C financial responsibility rules for closure, post-closure care, and liability coverage, and to proposed financial responsibility rules for corrective action for known releases. However, in some instances the Subtitle C and Subtitle I rules differ. For example, each allows different types of mechanisms, and the requirements for the financial test of self-insurance and reporting differ as well.

The Subtitle I and Subtitle C rules are based on different statutory authority. EPA is mandated under RCRA Subtitle I (section 9003(c)), to require UST owners or operators to demonstrate financial responsibility for corrective action and third-party compensation. EPA is also required, under RCRA Subtitle C (section 3004(g)), to promulgate financial responsibility requirements for corrective action for known releases at hazardous waste treatment, storage, and disposal facilities. By contrast, financial assurance requirements for closure, post-closure care, and liability coverage at Subtitle C facilities were promulgated under section 3004(e)(5) of RCRA, which authorizes EPA to publish such requirements "as may be necessary or desirable."

Other major differences are explained below as they relate to specific provisions of the Subtitle I rule. For each section of proposed 40 CFR Part 280, Subpart I, where there are major differences from the Subtitle C regulations, the following sections identify what these differences are and, where relevant, describe the rationale for the differences.

B. Section 280.91 Definition of Terms for Financial Responsibility

1. Accidental Releases. The proposed Subtitle I rule, unlike the Subtitle C rules, does not differentiate between sudden and nonsudden accidental releases.

Under the Subtitle C rules for liability coverage, owners and operators of land disposal facilities are required to demonstrate financial responsibility for third-party claims arising from both sudden and nonsudden accidental occurrences, whereas owners and operators of non-disposal facilities are required to maintain liability coverage for sudden accidental occurrences only. It is therefore necessary, in the Subtitle C rules, to define sudden and nonsudden accidental occurrences separately.

Under the proposed Subtitle I rule, by contrast, all UST owners and operators are required to maintain coverage for both types of events. Because the requirements do not differentiate between the types of coverage, separate definitions are not provided.

2. Legal Defense Costs. The Subtitle I definition of legal defense costs is broader than the Subtitle C definition which takes into account only the legal defense costs of the insurer, and only those costs related to defenses against third-party claims. The broader definition under the proposed Subtitle I rule reflects the fact that, unlike the Subtitle C definition, it applies to corrective action as well as to third-party damage claims.

C. Section 280.92. Amount and Scope of Required Coverage

1. Level of Per-Occurrence Coverage. Section 9003(d) of Subtitle I requires UST owners or operators of facilities engaged in petroleum production, refining, or marketing petroleum to carry at least $1 million of per-occurrence coverage for corrective action and third-party compensation. The proposed Subtitle I rules codify this per-occurrence statutory requirement. By contrast, Subtitle C provides no statutory guidance as to required or desirable levels of financial assurance. The amount of financial assurance required for the costs of closure and post-closure care at Subtitle C facilities is based on estimates by the owner or operator of the costs of the required tasks; the amount of per-occurrence required liability coverage for Subtitle C facilities is set by regulation: $1 million for sudden accidental occurrences and $3 million for nonsudden accidental occurrences.

2. Level of Aggregate Coverage. The Subtitle C rules require $2 million aggregate liability coverage for sudden accidental occurrences and $6 million aggregate liability coverage for nonsudden accidental occurrences. Subtitle I requirements provide for a range of aggregate levels for the combined costs of corrective action and liability claims due to both types of accidental occurrences; the range varies according to the number of USTs owned or operated.

The actual costs of releases will be directly related to the number of
treatment, storage, or disposal facilities (TSDFs) or USTs that are owned or operated by the same entity. The number of TSDFs owned or operated by a single entity varies from 1 to 50; however, the number of USTs owned or operated by a single entity can range from one to as many as several thousand. The range of levels of required aggregate coverage in the Subtitle I requirements reflects this greater variation in numbers of USTs owned or operated (TSDFs) or USTs that are owned or operated.

Mechanisms and Combinations of Requirements

1. Allowable Mechanisms. The proposed Subtitle I rule allows the use of indemnity contracts, while Subtitle C rules do not. Furthermore, Subtitle C requirements for liability coverage do not allow surety bonds and letters of credit for such coverage, but these are allowable mechanisms under the proposed Subtitle I rule. On the other hand, the Subtitle C requirements for financial assurance for closure and post-closure care and proposed Subtitle C requirements for financial assurance for corrective action allow the use of trust funds, while Subtitle I does not.

Indemnity contracts were not considered for Subtitle C. As proposed under Subtitle I, however, this instrument should provide adequate financial assurance. A trust fund mechanism (in contrast to a standby trust fund) is not proposed for the Subtitle I rules because funding the trust fund in a short period of time could be prohibitively expensive, while funding the trust fund over a longer pay-in period might not provide adequate financial assurance during the first years of tank operation.

Subtitle I allows surety bonds and letters of credit for corrective action and third-party liability coverage because, as designed, they should provide adequate assurance. (See the following sections on surety bonds and letters of credit for further discussion of why these mechanisms are allowed in the Subtitle I proposed rule.)

2. Combinations of Mechanisms. The mechanisms that may be combined to provide financial assurance under the Subtitle I rule differ from those that may be combined under the Subtitle C rules. Under the Subtitle C provisions for closure and post-closure care, the following mechanisms may be combined: trust funds, surety bonds, letters of credit, and insurance. The financial test and corporate guarantee may not be combined with any other mechanism. The Subtitle C provisions for liability coverage, however, allow the owner or operator of a TSDF to combine the financial test or corporate guarantee mechanisms with insurance, but do not allow the combination of a financial test and a corporate guarantee.

Under the proposed Subtitle I rule, all allowable mechanisms may be combined to provide coverage for corrective action and third-party liability, except for the financial test and corporate guarantee, which cannot be combined with each other if the financial statements of the owner or operator are consolidated with the financial statements of the guarantor. The Subtitle I rules thus differ from the Subtitle C rules first of all, in allowing financial tests and guarantees to be combined with other mechanisms, as well as insurance. The Agency's rationale for allowing combinations of the financial test and guarantee with other instruments under Subtitle I is, however, the same as its rationale for allowing either financial tests or corporate guarantees to be combined with insurance under the Subtitle C liability requirements. Such combinations can enable an owner or operator to combine a financial test or guarantee to cover the deductible portion of his policy, thereby decreasing his insurance costs. In a similar fashion, a financial test (or guarantee) combined with mechanisms such as surety bonds or letters of credit can reduce the costs of those mechanisms.

The proposed Subtitle I rules further differ from the Subtitle C rules in allowing the combinations of a financial test and a guarantee where the financial statements of the owner or operator are not consolidated with those of the guarantor. Under Subtitle C, the combination of a financial test and a guarantee was disallowed in order to avoid the situation whereby the assets of a TSDF owner or operator could be double counted in the assets of its corporate parent. (Under the Subtitle C financial responsibility rules, only corporate parents can offer a guarantee to their subsidiaries; non-parent guarantees are not allowed). The proposed Subtitle I provision prohibiting the combination of a financial test and a guarantee in cases where the owner or operator has consolidated financial statements with the guarantor is intended to accomplish the same objective; that is, to prevent double counting of assets for purposes of demonstrating financial assurance.

E. Section 280.94 Financial Test of Self-Insurance

The Subtitle I financial test of self-insurance differs from the Subtitle C financial test for liability coverage in the following respects:

- The Subtitle I tangible net worth requirement is 10 times rather than 6 times the annual aggregate amount to be covered.
- The Subtitle I financial test does not have a net working capital requirement or a requirement that owners or operators have one of the top four bond ratings assigned by Moody's or Standard and Poor's.
- The Subtitle I financial test does not require that firms have a specific amount of assets within the United States.
- The Subtitle I financial test does not require a firm to have or submit an independent certified public accountant's report on his financial statements, or an independent certified public accountant's special report attesting to the accuracy of the information presented by the owner or operator of the firm.

The Subtitle I test was selected based on statistical analyses that indicated that firms that have net worth equal to 10 times their corrective action and third-party liability obligations will be able to meet these obligations 99 percent of the time. The Subtitle C test for liability coverage was designed with different objectives in mind: the multiple
The indemnity that the Subtitle C rule requires is allowed to the extent necessary to ensure that a firm could pay its obligations even if its financial condition was rapidly deteriorating. The other differences between the two tests can be explained by the Agency’s intention that the Subtitle I test be easier to administer, easier to verify, and more accessible to privately held firms than the Subtitle C test. Administrative simplicity and test availability were particularly important priorities because of the large size of the Subtitle I regulated community and the presence of regulated firms in virtually every industry sector.

**F Section 280.95 Guarantee**

Subtitle C allows a guarantee for liability coverage only from a parent corporation that directly owns 50 percent of the voting stock of the owner or operator. The proposed Subtitle I requirements allow the guarantee to be provided by a related firm that (1) possesses a controlling interest in the owner or operator, or (2) possesses a controlling interest in a firm that in turn possesses a controlling interest in the owner or operator, or (3) is controlled through stock ownership by a parent corporation that also has a controlling interest in the owner or operator. A guarantee may also be provided by a firm that is engaged in a substantial business relationship with the owner or operator and is issuing the guarantee as an act incidental to that relationship. The Subtitle I definition of “substantial business relationship” should ensure that under many State insurance laws, the provision of guarantees incident to such relationship will not be considered as the “business of insurance” and therefore will not be subject to State regulation. Uncertainty about the applicability of State insurance laws was a major reason why the Agency did not propose nonparent guarantees under Subtitle C.

The Subtitle I provisions are intended to make the mechanism more broadly available by allowing corporate affiliates and corporate “grandparents” to provide guarantees, and by allowing firms, such as petroleum wholesalers, to provide guarantees to their customers.

**G Section 280.96 Indemnity Contract**

The proposed Subtitle I rule allows the use of indemnity contracts; Subtitle C rules do not. The indemnitor must be a corporation engaged in a substantial business relationship with the owner or operator and must issue the guarantee incidental to that relationship. This provision is designed to allow petroleum suppliers who are currently providing indemnities against liability to their customers to continue to do so, without being subject to many State insurance laws. Unlike the Subtitle I guarantee, however, the indemnity is not allowed to be used by related firms, in order to ensure that such firms rely on the guarantee or other mechanisms.

**H Section 280.97 Insurance**

The proposed Subtitle I rules for insurance policies closely follow the Subtitle C financial responsibility rules for liability coverage. Both require first-dollar coverage (exclusive of legal defense costs) and establish the same qualifications for insurers. Both also require an endorsement or a certificate of insurance as demonstrations of adequate insurance coverage; however, the wording and format of these documents as they are used for Subtitle C financial responsibility has been altered slightly for the Subtitle I rule. The major difference between the two programs is that insurance under Subtitle I can cover both corrective action costs and third-party damages. Under Subtitle C, insurance is not an allowable mechanism under the proposed corrective action financial responsibility rules for continuing releases, because such releases have already occurred; it is very unlikely therefore that insurance would be available to cover such releases.

**I Section 280.99 Surety Bond**

1. **Use of Surety Bonds to Compensate Third Parties.** Surety bonds are an allowable mechanism to demonstrate financial assurance for liability coverage under the proposed Subtitle I rule but not under existing Subtitle C regulations. At the time the Subtitle C rules for liability coverage were promulgated, the Agency believed that insurance would be obtainable. Further, because insurance is so well suited to this type of coverage, the Agency did not consider that other mechanisms besides insurance or the financial test would be necessary or desirable for demonstrating compliance with the rules. The Agency also questioned the validity and enforceability of surety bonds as a mechanism for assuring liability costs under State law.

Since the promulgation of these Subtitle C rules, however, the insurance market has been severely constrained, and the Agency has been exploring other options for demonstrating financial responsibility. As a result, the Agency is proposing in the Subtitle I rule to allow surety bonds (as well as other mechanisms) as alternatives to insurance. The Agency has developed procedures for drawing on these mechanisms, and requirements for the approval of such mechanisms as “valid and enforceable contracts” by the State Attorney General, in order to solve some of the possible problems that could inhibit the use of these mechanisms to cover, in particular, third-party liabilities.

2. **Use of Performance Bonds vs. Payment Bonds.** Under Subtitle I, performance bonds can be used to demonstrate financial responsibility for taking corrective action and compensating third parties. Under Subtitle C, both performance and payment bonds can be used to demonstrate financial responsibility for closure and post-closure care costs at permitted facilities. Neither type of bond is acceptable under the Subtitle C liability coverage rules.

In proposing performance bonds for the Subtitle I requirements, the Agency is also, in effect, allowing payment bonds, since performance bonds are written to allow a surety to choose to pay rather than perform.

**J Section 280.100 Letter of Credit**

The proposed Subtitle I rules allow letters of credit as financial assurance mechanisms for liability coverage; the Subtitle C requirements for liability coverage do not. Like surety bonds, letters of credit for liability coverage were not proposed under the Subtitle C requirements because the Agency assumed that owners or operators could use insurance and financial tests to demonstrate financial responsibility. The Agency has since discovered, however, that insurance for liability coverage may not be widely available. In addition, Subtitle I provides a statutory basis—by including letters of credit in its list of financial assurance mechanisms for both corrective action and third-party liability—for use of this mechanism. EPA is therefore proposing letters of credit for assurance under Subtitle I.

**K Section 280.101 Use of State-Required Mechanisms**

The Subtitle C rules require that the State-required mechanisms used to demonstrate compliance with the Federal financial responsibility requirements be “at least equivalent” to the financial mechanisms specified in Subtitle C. Subpart I substitutes the phrase “at least as stringent” in this same context.

The phrase “at least as stringent” more clearly emphasizes that State-required mechanisms must provide at least the same degree of assurance as
Federal mechanisms and is intended to parallel the requirement that State programs be no less stringent than the Federal program in order to receive State program approval under RCRA section 9004(b).

L. Section 280.102 State Fund or Other State Assurance

1. Acceptability of State Funds as a Method of Assurance. Existence of a State fund is listed as an acceptable method of assurance only in the proposed Subtitle I rules. State funds are approved under Subtitle I because (1) RCRA section 9004(c)(1) explicitly allows their use in authorized State programs and (2) because State funds can provide adequate assurance. While existence of a State fund is not listed explicitly as an allowable mechanism under the Subtitle C rules, it is a type of State assumption of responsibility, which is allowed by the Subtitle C regulations.

2. Submission to Regional Administrator of Description of State Fund or Other State Assurance. Under Subtitle C, the owner or operator must submit to the Regional Administrator a letter from the State describing the State's assumption of responsibility and requesting that it be considered acceptable. Under the proposed Subtitle I rules, the State must submit to the Regional Administrator a description of the State fund or other State assurance.

The Subtitle I requirement that States submit a letter on behalf of all owners or operators to be covered by the State fund or other State assurance was included because some State funds were designed only to cover unusual emergencies and not all types of UST releases. EPA therefore considered that the State is more qualified than owners or operators to determine whether the State fund may be used to satisfy the Subpart I financial requirements.

M. Section 280.103 Standby Trust Funds

A standby trust fund is being proposed under Subtitle I as an allowable depository mechanism for funds drawn on guarantees, indemnity contracts, surety bonds, and letters of credit. Standby trust funds have also been proposed in the Subtitle C financial responsibility rules for corrective action for known releases, and are required in the financial responsibility rules for closure and post-closure care. Under Subtitle C they are also used as a mechanism to hold funds drawn from other mechanisms. Such a depository mechanism is necessary, since EPA cannot directly receive funds drawn on financial assurance instruments; the funds must instead be remitted to the Treasury. A Congressional appropriation would then be required to obtain the funds for their original purpose. Under Subtitle C, a standby trust is not required for the corporate guarantee for liability coverage because the funds are paid directly to the third-party claimant.

N. Section 280.104 Substitution of Financial Assurance Mechanisms By An Owner or Operator

Under the proposed Subtitle I requirements, an owner or operator may substitute one allowable financial assurance mechanism for another, provided that it maintains a mechanism or combination of mechanisms that satisfies the financial responsibility requirement. The Subtitle C rules require an owner or operator to submit evidence of alternate financial assurance and obtain the written consent of the Regional Administrator before he is allowed to substitute the alternate assurance for his existing mechanism.

The decision not to require the written consent of the Regional Administrator under the Subtitle I rule is consistent with the Agency's general approach under Subtitle I to limit reporting requirements. Nevertheless, under the proposed Subtitle I rules, owners or operators will still have to maintain proof of continuous financial assurance.

O. Section 280.105 Cancellation or Nonrenewal by a Provider of Financial Assurance

1. Circumstances Under Which a Third-Party Financial Assurance Mechanism May Be Cancelled. Under the proposed Subtitle I rule, a provider of financial assurance may cancel or fail to renew an assurance mechanism 120 days after giving notice of termination to the owner or operator. The 120-day period during which a third-party mechanism cannot be cancelled is identical to the cancellation provisions for insurance, surety bonds, corporate guarantees, and letters of credit in the Subtitle C regulations for closure and post-closure care financial assurance. Under the Subtitle C provisions for surety bonds, guarantees, and letters of credit, if an owner or operator fails to provide alternate assurance within the 120-day period, the Regional Administrator may draw on the mechanism. These provisions differ from the Subtitle C provisions for liability coverage, which only allow a corporate guarantee to be cancelled if and when the Regional Administrator approves alternate liability coverage. Insurance for liability coverage under Subtitle C may be cancelled 60 days after written notice is received by the Regional Administrator.

The 120-day requirement was adopted for the Subtitle I cancellation requirements to avoid the situation where a provider of financial assurance does not have a definite date by which he can cancel the mechanism. For both the Subtitle I proposed rule and the RCRA Subtitle C closure and post-closure care regulations, specifying a definite time by which a provider may cancel was intended to increase the availability of third-party instruments to the extent possible without endangering human health and the environment.

The Subtitle C liability coverage requirements for the corporate guarantee (which allow cancellation only if an alternate means of assurance has been approved) may provide better assurance of continuous coverage than the 120-day provision. However, such provisions were not considered to be appropriate for the Subtitle I rules, given the decision to allow guarantees to be provided by non-parent corporations. Such non-parent guarantees are expected to be an important means of complying with the regulations for many UST owners or operators; however, these mechanisms are unlikely to be offered unless the guarantor can ascertain its potential liability under the mechanism. A provision that allows cancellation of the guarantee only if alternate assurance is obtained would leave the guarantor uncertain as to when his liability would end.

2. Time by Which an Owner or Operator Must Obtain Alternate Financial Assurance After Receiving a Notice of Cancellation from a Provider of Financial Assurance. Under the proposed Subtitle I rule, owners or operators of petroleum USTs must obtain alternate coverage within 60 days after receiving a notice of cancellation or nonrenewal from a provider of financial responsibility. Under comparable provisions in the Subtitle C program (i.e., the cancellation provisions for surety bonds, letters of credit, and corporate guarantees for closure and post-closure care financial assurance), the owner or operator must obtain alternate coverage within 90 days after receiving a notice of cancellation of his existing financial assurance instrument. (The Subtitle C provisions for liability coverage are not comparable in this respect, since neither the insurance nor the corporate guarantee provisions set time limits for obtaining alternate coverage on the basis of the receipt of a cancellation notice.)

Given the 120-day notice of cancellation period, the time in that...
period by which an owner or operator must obtain alternate coverage determines how long the Agency will have to draw on a mechanism before it is cancelled. Under the proposed Subtitle C rules, requiring owners or operators to obtain alternate financial assurance 60 days after receipt of a cancellation notice leaves the Agency 60 days in which to draw on the mechanism if the owner or operator fails to get alternate assurance and EPA determines that funds are needed. Under the Subtitle C rules, requiring owners or operators to obtain alternate assurance 90 days after receipt of a cancellation notice leaves the Agency 30 days in which to draw on the mechanism if the owner or operator fails to get alternate assurance. The Agency believes that the longer time period available in the Subtitle I case for deciding on whether to draw on existing mechanisms is necessary. In the Subtitle C case, it is certain that funds for closure and post-closure care will be needed. The Agency therefore will always draw on the existing financial assurance mechanism if the owner or operator fails to obtain alternate assurance after receiving notice that his existing mechanism will be cancelled. However, if an owner or operator of an UST (in the Subtitle I case) fails to obtain alternate assurance after receipt of a cancellation notice, it is not certain that funds will be needed from an existing mechanism. To justify drawing on the existing mechanism, the Agency must first determine whether a release has occurred or is suspected; this determination will probably require a site inspection. Therefore, the Agency will need a longer time period in the Subtitle I case than in the Subtitle C case to decide whether to draw upon the existing mechanism.

P Section 280.106 Reporting by Owner or Operator

Under the Subtitle C requirements, an owner or operator must submit evidence of financial assurance to EPA. EPA maintains this evidence throughout the operating life of the facility and, if post-closure care is required, throughout the post-closure care period. Under the proposed Subtitle I rules, an owner or operator is not required to submit evidence of financial assurance on a regular basis. Instead, evidence is submitted only in the following circumstances:

(1) When the owner or operator notifies the Regional Administrator of the existence of a new petroleum underground storage tank under § 280.22;

(2) Within 30 days after the owner or operator has a known or suspected release from a petroleum underground storage tank required to be reported under § 280.74;

(3) If the owner or operator fails to obtain alternate coverage as required by this subpart, within 30 days after the owner or operator receives notice of:

• commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming a provider of financial assurance as a debtor,

• suspension or revocation of the authority of a provider of financial assurance to issue a financial assurance mechanism,

• failure of a guarantor or indemnitor to meet the requirements of the financial test, or

• other incapacity of a provider of financial assurance;

(4) When an owner or operator receives notice that an assurance mechanism is cancelled, as required by § 280.105(b); or

(5) If the owner or operator using the financial test fails to meet the requirements of the test, as required by § 280.94.

The Agency recognizes that requiring UST owners or operators to submit evidence of Subtitle I financial responsibility on a regular basis may improve compliance with the rule. However, the Agency believes that reporting requirements under Subtitle I need not and should not be as stringent as those of Subtitle C for the following reasons:

• The Subtitle I regulated community is much larger than the Subtitle C regulated community, therefore amplifying the problem of regular administrative review.

• The absence of regular reporting will not necessarily result in non-compliance. There is evidence that UST owners or operators are already obtaining insurance to limit their exposure to future costs of corrective action or third-party claims.

• The Leaking UST Trust Fund creates incentives for owners and operators to comply, since the Fund may limit the liability of owners or operators to the amount of required financial responsibility only if the owner or operator has maintained evidence of financial responsibility and if other conditions are met. The enforcement suspension provisions create incentives for owners or operators to demonstrate to the Agency that they have attempted to comply with the financial responsibility regulations.

Q Section 280.107 Recordkeeping

Under Subtitle I, an owner or operator must maintain evidence of financial responsibility at the tank site or place of business until one year following closure. This requirement applies both to active mechanisms and mechanisms that have been cancelled or renewed. In addition, if a release is confirmed, evidence of all assurance mechanisms covering such a release must be maintained until one year after completion of closure and corrective action. Under Subtitle C, there are no requirements for owners or operators to maintain evidence of financial responsibility at a hazardous waste facility or place of business.

The difference between Subtitle I and Subtitle C on recordkeeping is related to the difference between the two with respect to reporting of financial assurance to EPA. Because Subtitle C requires owners or operators to submit evidence of financial assurance to EPA under all circumstances, EPA controls the records of financial assurance, thus rendering unnecessary a requirement that owners or operators also maintain such evidence at the facility or place of business. In contrast, Subtitle I requires UST owners or operators to report financial assurance to EPA only under certain circumstances; therefore, owners or operators must be required to maintain records of financial assurance so that records can be accessed if necessary (for example, if a claim is made on an insurance policy from previous years).

The proposed Subtitle I rule, unlike the Subtitle C rule, also requires the owner or operator to maintain a certification that the financial assurance mechanism used to demonstrate financial responsibility is in compliance with the requirements of the rule. Because owners or operators are not required to submit evidence of financial assurance to EPA on a regular basis, the Agency believes that requiring the additional certification is necessary to provide incentives for owners or operators to comply with the regulations at all times. Furthermore, the certification requirement will serve as an enforcement tool. The certification is not necessary in the Subtitle C context because the more stringent reporting requirements enable the Agency to monitor at all times compliance with the rule.

R Section 280.108 Drawing on Financial Assurance Mechanisms

Under Subtitle I, the Agency is proposing special procedures for drawing on certain mechanisms (i.e., guarantees, indemnity contracts, surety bonds, and letters of credit) for third-party liability claims; the Subtitle C
rules do not contain such procedures since (except for guarantees) these mechanisms are not allowed for liability coverage.

Guarantors, indemnitors, sureties, and providers of letters of credit do not have well-developed procedures for investigating claims of third-party liability. Instead, they require precise definitions of the triggers for payment under those mechanisms: Subtitle I, respectively, relies on either (1) agreements by both the owner or operator and the provider of financial assurance that the claim is valid and should be paid, or (2) a court order establishing a final judgment against the owner or operator. These two alternatives are similar to the procedures used to determine when insurance payments should be made, for cases in which the claim is not contested by the insurer, and provide a precise statement that can be relied upon by the provider of financial assurance.

S. Section 280.109 Release from Financial Assurance Requirements

Under Subtitle I, the owner or operator will be released from financial assurance requirements upon completion of closure of tanks requiring coverage or, if corrective action is required, upon completion of the corrective action and closure. Under Subtitle C financial assurance for closure and liability coverage, the owner or operator will be released from financial assurance requirements after certification that closure has been completed in accordance with the approved plan. For post-closure care, the owner or operator will be released after certification that the post-closure care period has been completed in accordance with the approved plan.

Subtitle I does not allow the automatic release of the owner or operator from financial assurance requirements at the closure of a tank because a release requiring corrective action could be discovered during closure and the costs of corrective action could go unfunded.

T. Section 280.110 Bankruptcy or Other Incapacity of Owner or Operator or Provider of Financial Assurance

1. Bankruptcy or Other Incapacity of Owner or Operator or Provider of Financial Assurance. The proposed requirements for the Subtitle I program are the same as the Subtitle C requirements. The language of the requirements, however, has been amended to be more applicable to the specific assurance instruments and terminology of the Subtitle I proposal.

Under both sets of requirements, an owner or operator must notify the Regional Administrator by certified mail within 10 days of the start of a bankruptcy proceeding in which he is named debtor. Under the Subtitle C requirements, a guarantor who is named as a debtor in a bankruptcy proceeding must notify the Regional Administrator, whereas under the Subtitle I rules in such a situation the guarantor must notify the owner or operator. The difference is due to the fact that under the Subtitle I requirements, EPA must be notified only if the owner or operator cannot get alternate coverage in the event of a guarantor’s bankruptcy.

The proposed Subtitle I rule further differs from the Subtitle C requirements in that an indemnitor named as a debtor in a bankruptcy proceeding must also notify the owner or operator. The Subtitle C requirements do not have this provision for indemnitors, because indemnity contracts are not allowable financial responsibility mechanisms under the rules.

2. Incapacity of a State Fund or Other State Assurance. If a State is assuming responsibility for financial assurance under the Subtitle C requirements, it does not have to notify the owner or operator or Regional Administrator if it becomes incapable of assuming financial responsibility.

Under Subtitle I, however, a State that provides a State fund as evidence of financial responsibility must notify the owner or operator and the Regional Administrator if the State fund becomes incapable of providing financial responsibility as required under the financial assurance rules. The proposed Subtitle I rule requires this notification because incapacity of a State fund is a concrete, definable event that can occur for a number of reasons; for example, monies in a State fund could be depleted. Incapacity of a State assuming financial responsibility under Subtitle C is, by contrast, an extremely unlikely event.

U. Section 280.111 Suspension of Enforcement

RCRA section 9003(d)(5)(D) authorizes the Agency to develop procedures and criteria for suspending enforcement of the financial responsibility requirements for particular classes or categories of underground storage tanks or for underground storage tanks located in particular States. Subtitle C contains no comparable provisions.

V Integration with Other EPA Programs

In proposing the Subtitle I financial responsibility requirements, the Agency has considered the integration of these requirements with other EPA programs, including other Subtitle I rulemakings and the Leaking Underground Storage Tank Trust Fund program.

A. Other Subtitle I Rulemakings

Certain requirements in other Subtitle I rulemakings are relevant to the UST financial responsibility requirements proposed today. For instance, the provisions of the UST corrective action requirements may affect the availability of the financial assurance mechanisms proposed today by influencing the range and certainty of corrective action costs.

In addition, reporting of a tank release under the corrective action requirements triggers the need to submit evidence of financial responsibility for review under the Subpart I financial responsibility requirements. The Agency is proposing today that owners or operators of petroleum USTs must provide evidence of financial assurance until one year after closure or, if corrective action is needed at closure, one year after closure and corrective action are completed. Thus, the procedures developed in UST closure and corrective action rulemakings for determining when closures occur or, if corrective action has been completed, will affect the options chosen for terminating financial responsibility requirements.

In addition, the technical standards for USTs containing petroleum may influence the appropriate amounts of coverage. The release detection requirements eventually may lower costs of corrective action and third-party damages because releases will be detected earlier. UST technical standards should reduce the likelihood of releases from USTs containing petroleum; adjustments may therefore be needed to the aggregate amounts of coverage, which are based on the probability of a release. Because of these potential changes, the Agency will monitor the costs and frequency of releases and, if necessary, adjust the required amounts of coverage.

Finally, the Agency lacks sufficient data to set the appropriate amounts of financial responsibility for USTs containing regulated substances other than petroleum. Thus, EPA is developing an advance notice of proposed rulemaking to help gather data on the frequency of releases from such USTs; costs of corrective action and third-party damages; and the availability of the assurance mechanisms for the regulated community.
B. Leaking Underground Storage Tank (UST) Trust Fund and Response Program

SARA amended Subtitle I by adding a new Subsection 9003(h), to establish a response program for releases from USTs containing petroleum. As part of this program, Congress authorized the Administrator to issue corrective action orders and to expend monies from the Leaking Underground Storage Tank (UST) Trust Fund to pay for corrective action costs and certain enforcement and cost recovery activities at petroleum-containing UST sites. Before the effective date of regulations promulgated under section 9003(c) of Subtitle I, expenditures from the Leaking UST Trust Fund can be made when, in the judgment of the Administrator or State, corrective action is necessary to protect human health and the environment. After the effective date of these UST regulations, Fund monies can be used to pay for corrective action in any of the following situations:

(1) An owner or operator who is required to undertake the corrective action and who is capable of carrying out corrective action properly does not exist or cannot be identified;

(2) Prompt action by the Administrator (or State) is necessary to protect human health and the environment;

(3) The financial resources of the owner or operator, including any UST financial assurance, are inadequate to pay the entire cost of the corrective action, and expenditures from the Fund are necessary to assure effective corrective action; or

(4) An owner or operator has failed or refused to comply with an order to perform corrective action.

Section 9003(b)(11) explicitly prohibits the expenditure of monies for corrective action at any facility where the owner or operator has failed to maintain evidence of financial responsibility in the required amounts, except (1) in cases where there is no solvent owner or operator, or (2) in cases where immediate action is necessary to respond to an imminent and substantial endangerment of human health or the environment, or (3) to undertake an "allowable corrective action" to protect human health.

Section 9003(h)(5) defines these allowable corrective actions to include "temporary or permanent relocation of residents and alternative water supplies" and exposure assessments undertaken to protect human health.

The Trust Fund and the financial responsibility program under Subtitle I are closely related. The most basic relationship is that the level of coverage required in the financial responsibility regulations will affect the potential draw on the Trust Fund. This is because, according to the way the Trust Fund is established in the statute, the level of financial assurance required acts as a kind of "deductible" to the coverage provided by the Trust Fund. The Trust Fund may pay for the costs of corrective action that exceed the amount of coverage required under the financial responsibility rules. Thus, the higher the required coverage, the less the potential draw on the Trust Fund. If, however, the owner or operator does not maintain coverage in the amounts required in the financial responsibility regulations, the relationship is somewhat different. In these cases, the Trust Fund may be drawn upon only in the limited circumstances, as described above. In addition, in cases where EPA seeks to recover costs for a response to a leaking UST, full costs can be sought from owners or operators who have not maintained financial responsibility.

The Agency also may use monies from the Fund to cover corrective action costs for classes of tank owners and operators that are granted a suspension of enforcement of the financial responsibility requirements under § 280.111. Finally, States must pay for 10 percent of the costs of corrective action under the Trust Fund after the Federal UST regulations become effective. To finance their contributions, some States may create funds that also may be used as methods of assurance.

VI. State Program Approval

Section 9004 of RCRA allows any State to submit an underground storage tank regulatory program for review and approval by EPA. EPA is proposing procedures and standards for State regulatory program approval elsewhere in today's Federal Register. An EPA-approved State UST regulatory program will operate "in lieu of" the Federal program. The Agency may approve the State program if the State demonstrates that its program (1) imposes requirements that are "no less stringent" than the Federal leak detection, prevention, correction, and financial responsibility requirements and (2) provides for adequate enforcement of compliance with such requirements. The statute, however, does allow EPA to grant interim approval to States that have established less stringent requirements in certain areas.

The Regional Administrator may approve a State UST program that fails to establish requirements that are "no less stringent" than the Federal requirements for all elements of the Federal program for an interim period. A State program may receive interim approval if the State does not have requirements that are "no less stringent" than the Federal requirements, for (1) maintaining a leak detection system or comparable system, (2) maintaining records of leak detection systems, (3) reporting of releases from tanks and corrective action used to respond to the release, and (4) tank closure. A State program cannot receive interim or final approval if it has financial responsibility requirements that are less stringent than those in today's rulemaking.

VII. Economic and Regulatory Impacts

A. Regulatory Impact Analysis

1. Compliance With Executive Order 12291. Sections 2 and 3 of Executive Order 12291 (46 FR 131393, February 19, 1981) require that a regulatory agency determine whether a new regulation will be "major" and, if so, that a regulatory impact analysis be conducted. A major rule is defined as one that is likely to result in (1) an annual effect on the economy of $100 million or more; (2) a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions; or (3) significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of U.S.-based enterprises to compete with foreign-based enterprises in domestic or export markets.

EPA has conducted an RIA of the proposed Subtitle I financial responsibility requirements for petroleum-containing underground storage tanks. Based on this analysis, the Agency has concluded that this regulation may have annual costs of greater than $100 million. Therefore, today's proposed regulation is a major rule, as defined by E.O. 12291. The following five sections summarize the results of the RIA. Section 2. describes the regulated community affected by this regulation, Section 3. presents some of the methods and assumptions used to produce the RIA, Section 4. presents EPA's estimates of the annual real resource costs of the proposal, Section 5. discusses the regulation's economic impacts, and Section 6. describes its potential benefits.

2. The Regulated Community. This proposed regulation is estimated to apply to 1.4 million underground storage tanks (USTs) located at 468,000 separate facilities. For the purpose of this analysis, the regulated community was divided into four major sectors: retail motor fuel marketing, agriculture, local...
government, and general industry. Retail motor fuel marketing is the largest single affected sector and includes 335,000 retail motor fuel outlets owned by almost 90,000 firms. This sector has been further subdivided into three segments: refiners, multi-outlet retail chains, and open dealers (defined as firms owning and operating a single retail motor fuel outlet). The agricultural sector includes all farms owning an UST with a capacity of more than 1,100 gallons; approximately 86,000 USTs located at 50,000 farms meet this definition. Local governments own 62,000 USTs. For the purposes of this analysis, the general industry sector includes all other sectors (i.e., sectors other than retail motor fuel marketing, agriculture, and local government) where USTs are located. Firms in the general industry sector range from manufacturing concerns to small retail operations. USTs in this sector usually are used to provide motor fuel for fleets of vehicles (e.g., at trucking firms and automobile rental agencies) or to provide convenient access to motor fuel for off-the-road vehicles (e.g., construction equipment). The general industry sector is estimated to contain 418,000 USTs at 192,000 facilities owned by more than 137,000 firms.

3. Assumptions and Methodology Used in the RIA. Following are the key assumptions used to estimate the costs and other impacts of this regulation:

- Owners, rather than operators, satisfy and pay the costs of financial responsibility requirements, except when the owner is a private individual and the operator is a business corporation.
- All owners who qualify for self-insurance use this mechanism to satisfy their financial responsibility requirements, and incur real resource costs for developing and maintaining the required records and reports.
- All firms currently insured for corrective action and compensation of third parties will maintain their insurance to comply with this regulation.
- Firms that are not currently insured and that cannot use the financial test of self-insurance will attempt to obtain insurance (rather than other financial assurance mechanisms) to comply with this regulation.
- Insurance will only be available to those firms meeting insurers' qualifications for insurability. Such qualifications may include specifications with regard to tank age, prior release histories, etc. Because the number of currently uninsured firms that will meet these qualifications is uncertain, regulatory costs have been estimated for three scenarios: (1) no additional firms will be insured, (2) 50 percent of uninsured firms that cannot meet the financial test will be insured, and (3) 100 percent of uninsured firms that cannot meet the financial test will not be able to get insurance.
- Insurance premium costs for petroleum UST owners in industry (and government) sectors other than retail motor fuel marketing are equivalent to current and projected insurance premiums of UST owners in the retail motor fuel marketing sector. (In sectors other than retail motor fuel marketing, there is no active UST insurance market.)
- Firms that cannot obtain insurance will apply for a suspension of enforcement and incur costs associated with documenting the fact that no financial assurance mechanisms are available and that progress toward the formation of a risk retention group or toward coverage under a State fund is being made. These costs will depend on the extent to which insurers and other providers of financial assurance mechanisms are willing to provide letters stating that entire classes of UST owners cannot obtain financial assurance. If insurers and other providers of financial mechanisms are unwilling to provide such letters, each owner will need one hour per year of managerial time for activities related to maintaining suspension of enforcement status. If insurers and other providers of financial mechanisms are unwilling to provide such letters, each owner will need to provide individual proof of his or her inability to obtain financial assurance, and the time needed for activities related to maintaining suspension of enforcement status will rise to eight hours of managerial time per owner per year. (The costs of forming a risk retention group are not examined in the RIA.)
- For the purposes of analyzing economic impacts and possible benefits of the proposed financial responsibility regulation, firms that meet insurers' criteria for insurability incur corrective action costs and third-party liability costs consistent with insurance premiums and past and projected insurance claims experience. The probabilities and costs of corrective actions used for this analysis are different from those used in the Technical Standards RIA. The Technical Standards RIA develops probabilities and costs of corrective action for all regulated USTs. The Financial Responsibility RIA, on the other hand, develops probabilities and costs of corrective action only for those facilities meeting insurers' criteria for insurability. The Financial Responsibility RIA thus excludes, for example, the probabilities and costs of corrective action for incidents occurring at facilities owned by firms unable to obtain insurance, incidents occurring before the owner has insurance, and release incidents that are not reported to the insurer.

4. Annual Real Resource Costs. The real resource costs of the proposed regulation are defined as those resources expended as a result of the regulation that would not have been expended in its absence. Real resource costs therefore exclude insurance costs for those owners or operators who already have insurance for their USTs. For owners or operators who purchase insurance in order to comply with this regulation, those portions of the premium used to pay for corrective action, third-party liability, and claims adjustment, do not represent real resource costs; these costs would be incurred in any case. The use of insurance simply transfers the payment of these costs from the owner or operator to the insurer. (The costs and regulatory Impacts of corrective action attributable to the UST technical standards are analyzed in the Technical Standards Regulatory Impact Analysis.)

The portion of insurance premiums that do represent real resource costs include the insurer's profits, administrative costs, and sales costs. These real resource costs are equal to about 40 percent of the total insurance premium cost. Also included in real resource costs are the recordkeeping and reporting costs associated with certifying compliance with this regulation, updating financial mechanisms annually, sending required reports to EPA (e.g., notifying EPA of bankruptcy), reporting associated with requesting a suspension of enforcement, etc.

The total annual real resource costs of the proposed financial responsibility requirements for all petroleum UST owning sectors is estimated to be $284.6 million, assuming that all firms that do not have insurance or do not qualify for the financial test can purchase insurance. Using this assumption, no firms would have to apply for a suspension of enforcement. Under the assumption that 50 percent of the firms that do not have insurance or cannot qualify for the financial test can purchase insurance, the total annual real resource costs of the financial responsibility requirement range from $144.5 million to $235.4 million, depending on the cost of suspension of enforcement. Assuming that all firms that do not have insurance or cannot...
qualify for the financial test could not purchase insurance reduces the real resource costs of the regulation to between $4.2 million and $33.4 million.

These real resource costs represent recordkeeping and reporting costs for those owners or operators who already have financial assurance mechanisms, the recordkeeping and reporting costs associated with applying for a suspension of enforcement, and other mandatory recordkeeping and reporting costs for all UST owners or operators. The lower cost estimate is applicable if insurers and other providers of financial assurance are willing to provide letters stating that entire classes of owners will not be able to obtain financial assurance. The higher cost estimate is applicable if each owner must obtain individual letters of rejection from providers of financial assurance.

5. Economic Impacts. The economic impacts of today's proposed regulation were carefully examined for the open dealer and small jobber segments of the retail motor fuel marketing sector. The open dealer segment was chosen for detailed analysis because severe economic impacts were considered to be most likely in this segment. Open dealer firms are small (the median net worth is $90,000 and the median value of assets is $210,000); none currently have UST insurance, and none can use the financial test; however, the use of USTs is essential to firms in this business. For UST-owning firms in the general industry sector with less than $1 million in assets, a screening analysis was performed to determine impacts.

The open dealer analysis only applies to those open dealer firms that can meet insurers' qualifications for insurability (e.g., with regard to age of tanks, release history, etc.). In the first year after implementation of the proposed financial responsibility requirements, an estimated 0.68 percent of existing open dealer firms meeting insurers' criteria for insurability would close as a result of the costs of insurance premiums. If all open dealer firms can meet insurers' qualifications for insurability, 555 firms would close. However, over the long run (10 years), EPA estimates that a smaller percentage of firms would exit the industry if they had UST insurance than if they did not. Although the costs of insurance premiums may force some low-profit, marginal open dealer firms to close, fewer, larger, more profitable firms would close as a result of paying insurance premiums than would close if they were required to pay the costs of third-party liability awards and corrective actions from their own funds.

To the extent that financial responsibility requirements help make insurance available to firms in this segment (and some insurers believe that this may be the case), the economic impact of these financial responsibility requirements on many firms in this segment may be lessened.

Outside of the open dealer segment, the economic impacts of the proposed financial responsibility requirements on the retail motor fuel marketing sector will be negligible. EPA's analysis of the economic impact of these requirements on small jobber firms found that if these firms, which typically own 13 or fewer tanks, can get insurance at the $1 million per-occurrence and aggregate levels, fewer firms would exit the industry with insurance than without it. However, if small jobber firms had to purchase insurance at the $2 million aggregate level, the economic impacts of this regulation would be significantly worse for these firms than if they were not insured.

In the general industry sector, EPA examined financial data for firms in 65 four-digit SIC code categories that contain firms that own USTs. In only 11 of these SIC code categories would the value of premiums exceed 10 percent of the before-tax profits of average firms in these categories having less than $1 million in assets. Most firms in these SIC code categories do not use USTs, and it is possible that, if the costs of today's regulation imposed severe impacts on those firms in these sectors that do use them, they could avoid these costs by closing their UST facilities.

6. Benefits. Today's proposal is associated with a variety of potential economic benefits that are discussed in qualitative terms in the RIA. For example, these regulations provide for an improved allocation of resources by ensuring that the costs of corrective action and third-party liability awards are reflected in the costs and in the pricing decisions of UST-owning firms in the affected sectors. Thus the proposed rule may result in greater internalization of costs and improved operation of the market. In addition, some industry sectors may experience fewer business disruptions as a consequence of a firm's use of UST insurance, because fewer small firms will be forced to exit the industry. In the case of smaller firms that could not pay for corrective action without insurance, having insurance may provide an incentive to report releases more promptly. (For example, in the absence of insurance, an owner might be reluctant to report a release having cleanup costs high enough to force him out of business). Further, requiring owners of USTs, to obtain a financial assurance mechanism provides an incentive for them to replace or upgrade their USTs to lower the costs of paying for the mechanism (e.g., lower insurance premiums). An increase in the number of tanks replaced or upgraded also will reduce the risk of environmental contamination and endangerment of human health.

There are also potential cost savings with respect to the use and administration of the Leaking UST Trust Fund set up by SARA. If the Leaking UST Trust Fund does not have adequate funds to pay for all UST corrective actions necessary to protect human health and the environment, these financial responsibility requirements will benefit human health and the environment by ensuring that the Trust Fund is used to address a larger number of serious releases (where there is no identifiable owner or operator).

Most of the benefits of the proposed regulation can be estimated only qualitatively at the present time. However, for the open dealer segment it was possible to compare quantitatively the value of corrective action costs and third-party liability awards that would be met if firms meeting insurers' qualifications of insurability were insured and the value of corrective action costs and third-party liability awards that would not be met if these firms did not have insurance. For open dealer firms qualifying for insurance, $1.119 per facility per year in corrective action costs and third-party liability awards would be left unfunded if such firms did not in fact purchase insurance. The total value of the unfunded financial responsibility remaining if all firms in the segment obtained insurance would be reduced by $88 million.

B. Regulatory Flexibility Act

Pursuant to the Regulatory Flexibility Act (5 U.S.C. 601 et seq.), whenever an agency is required to publish a general notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the impact of the rule on small entities (i.e., small businesses, small organizations, and small governmental jurisdictions). No regulatory flexibility analysis is required, however, if the head of the agency certifies the rule will not have a significant economic impact on a substantial number of small entities.

EPA has conducted an analysis of the impacts of this regulation on small
businesses as part of its regulatory impact analysis (RIA) and has concluded that this regulation may have a significant economic impact on some small businesses. EPA examined the economic impacts of financial responsibility requirements in the small business segments of the retail motor fuel marketing industry and in general industry sectors. In the retail motor fuel marketing sector, this analysis found that economic impacts in the aggregate for firms meeting insurers’ qualifications of insurability are very small in the short run but are actually favorable over the long run. However, the cost of insurance premiums may force some low-profit, marginal open dealer firms to close. Larger, more profitable open dealers and dealer jobbers and convenience store chains would actually have their rate of exit from the industry reduced if they could obtain insurance.

In the general industry sectors, in only 11 of 65 SIC codes examined would the cost of insurance premiums represent more than 10 percent of before-tax profits. Most firms in these SIC code categories do not use USTs, and it is possible that, if the costs of today’s regulation imposed severe impacts on these firms, they would avoid these costs by closing their USTs. For small businesses not qualifying for insurance, the costs of applying for a suspension of enforcement are small and unlikely to cause a significant economic impact. However, the RIA does not fully consider all situations that might cause significant economic impacts, nor does it consider all developments that might mitigate the economic impacts of financial responsibility requirements. For example, economic impacts on small businesses might be greater than those estimated for firms that are able to obtain insurance, but only if these businesses are forced to pay a very high premium or if all their tanks are replaced.

On the other hand, the RIA does not examine the possibility that all corrective action costs and third-party liability awards might be paid by State funds financed by taxes on gasoline. Such funds would minimize economic impacts on small businesses and the cost of these financial responsibility requirements to the consumers of motor fuel.

The Agency has conducted a separate RIA and Regulatory Flexibility Analysis of the UST technical standards proposed elsewhere in today’s Federal Register. The technical standards RIA assesses the costs of corrective action attributable to corrective action requirements. The Agency concluded in that analysis that the technical standards, including corrective action requirements, would have a significant impact on a substantial number of small entities.

C. Paperwork Reduction Act

Pursuant to section 3504(h) of the Paperwork Reduction Act of 1980, the reporting and recordkeeping provisions of today’s proposed rule have been submitted to the Office of Management and Budget (OMB) for approval. Comments on these requirements should be submitted to the Office of Information and Regulatory Affairs, OMB, 726 Jackson Place, NW., Washington, DC 20503, marked “Attention: Desk Officer for EPA.” Should EPA promulgate a final rule, the Agency will respond to comments by OMB or the public regarding the information collection provisions of the rule.

VIII. Supporting Documents

Background materials, including a supporting document, discussing the most significant issues raised by today’s proposed rule have been prepared and are included in this rulemaking docket. Other Federal Register notices on financial assurance, and background documents, which were prepared for other financial assurance regulations under RCRA Subtitle C, Subpart H, include the May 2, 1986, final regulations on closure, post-closure care, and financial responsibility, 51 FR 18433; the March 19, 1985, proposed regulations, 50 FR 11068; the July 26, 1982, interim final, land disposal regulations, 47 FR 32274; the April 7 1982, final rules on financial assurance for closure and post-closure care, 47 FR 15032; the January 12, 1981, interim final rules, 48 FR 2802; and the May 19, 1980, proposed regulations, 45 FR 33260.

These supporting materials are available for inspection by the public in Room LG–100, U.S. Environmental Protection Agency, 401 M Street, SW., Washington, DC, from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding Federal holidays. Copies of several of these documents also are available for public inspection and review in the libraries of EPA’s Regional Offices.

IX. List of Subjects in 40 CFR Part 280

Administrative practice and procedure, Environmental protection. Insurance, Oil pollution, Penalties, Petroleum, Reporting and recordkeeping, requirements, Surety bonds, Underground storage tanks, Water pollution control.

Lee M. Thomas,
Administrator.

For the reasons set out in the preamble, Chapter I of Title 40 of the Code of Federal Regulations is proposed to be amended as follows:

PART 280—TECHNICAL STANDARDS AND CORRECTIVE ACTION REQUIREMENTS FOR OWNERS AND OPERATORS OF UNDERGROUND STORAGE TANKS

1. The authority citation for Part 280 is revised to read as follows:

Authority: Sections 2002, 9001, 9002, 9003, 9004, 9005, 9006, 9007, and 9008 of the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6901, 6901(a), 6901(b), 6901(c), 6901(d), 6901(e), 6901(f), and 6901(h)).

2. 40 CFR Part 280 is amended to add a new Subpart I as follows:

Subpart I—Financial Responsibility

Sec.
280.00 Applicability.
280.01 Definition of terms.
280.02 Amount and scope of required coverage.
280.03 Allowable mechanisms and combinations of mechanisms.
280.04 Financial test of self-insurance.
280.05 Guarantee.
280.06 Indemnity contract.
280.07 Insurance.
280.08 Risk retention group coverage.
280.09 Surety bond.
280.100 Letter of credit.
280.101 Use of State-required mechanism.
280.102 State fund or other State assurance.
280.103 Standby trust fund.
280.104 Substitution of financial assurance mechanisms by an owner or operator.
280.105 Cancellation or nonrenewal by a provider of financial assurance.
280.106 Reporting by owner or operator.
280.107 Recordkeeping.
280.108 Drawing on financial assurance mechanisms.
280.109 Release from the requirements of this subpart.
280.110 Bankruptcy or other incapacity of owner or operator or provider of financial assurance.
280.111 Suspension of enforcement.

§ 280.50 Applicability.

(a) This subpart applies to owners and operators of all underground storage tanks containing petroleum except as otherwise provided in this section.

(b) The owners and operators of underground storage tanks installed after the effective date of these regulations become subject to the
requirements of this subpart at the time the tank is put into operation.

d) The requirements of this subpart do not apply to owners and operators of underground storage tanks containing a mixture of petroleum and other regulated substances in which petroleum is not the principal component.

e) The requirements of this subpart do not apply to owners or operators of any of the following types of UST systems:

1. Wastewater treatment tanks;
2. Sumps;
3. Underground storage tank systems containing used oil;
4. Underground bulk storage tanks;
5. Underground storage tank systems containing radioactive waste;
6. Electrical equipment; and

§ 280.91 Definition of terms.

When used in this subpart, the following terms shall have the meanings given below:

"Accidental release" means any sudden or non-sudden release of petroleum arising from operating an underground storage tank that results in a need for corrective action, bodily injury, or property damage neither expected nor intended by the tank owner or operator.

"Bodily injury" shall have the meaning given to this term by applicable State law; however, this term shall not include those liabilities which, consistent with standard insurance industry practices, are excluded from coverage in liability insurance policies for property damage.

"Provider of financial assurance" means an entity that provides financial assurance to an owner or operator of an underground storage tank through one of the mechanisms listed in §§ 280.95–280.102, including a guarantor, indemnitor, insurer, risk retention group, surety, issuer of a letter of credit, issuer of a State-required mechanism, or a State.

"Substantial business relationship" means the extent of a business relationship necessary under applicable State law to make a guarantee or indemnity contract issued incident to that relationship valid and enforceable. A guarantee or indemnity contract is issued "incident to that relationship" if it arises from and depends on existing economic transactions between the guarantor or indemnitor and the owner or operator.

"Tangible net worth" means the extent of a business relationship necessary under applicable State law to make a guarantee or indemnity contract issued incident to that relationship valid and enforceable. A guarantee or indemnity contract is issued "incident to that relationship" if it arises from and depends on existing economic transactions between the guarantor or indemnitor and the owner or operator.

"Voluntary conclusion" means the extent of a business relationship necessary under applicable State law to make a guarantee or indemnity contract issued incident to that relationship valid and enforceable. A guarantee or indemnity contract is issued "incident to that relationship" if it arises from and depends on existing economic transactions between the guarantor or indemnitor and the owner or operator.

§ 280.92 Amount and scope of required coverage.

(a) Owners or operators of petroleum underground storage tanks must obtain coverage for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from operating petroleum underground storage tanks in the amount of at least $1 million per occurrence.

(b) Owners or operators of petroleum underground storage tanks must obtain annual aggregate coverage for taking corrective action and for compensating third parties for bodily injury and property damage caused by accidental releases arising from operating petroleum underground storage tanks in at least the following amounts:

1. For owners or operators of 1 to 12 petroleum underground storage tanks, $1 million;
2. For owners or operators of 13 to 60 petroleum underground storage tanks, $2 million;
3. For owners or operators of 61 to 140 petroleum underground storage tanks, $3 million;
4. For owners or operators of 141 to 250 petroleum underground storage tanks, $4 million;
5. For owners or operators of 251 to 340 petroleum underground storage tanks, $5 million; and
6. For owners or operators of 341 or more petroleum underground storage tanks, $6 million.

(c) For purposes of paragraph (b) of this section only, "a petroleum underground storage tank" means a single containment unit and does not mean combinations of single containment units.

(d) Except as provided in paragraph (e) of this section, if the owner or operator uses separate mechanisms or separate combinations of mechanisms to demonstrate financial responsibility for corrective action or for compensating third parties for bodily injury and property damage caused by sudden accidental releases or for compensating third parties for bodily injury and property damage caused by non-sudden accidental releases, the amount of coverage provided by each mechanism or combination of mechanisms must be in the full amount specified in paragraphs (a) and (b) of this section.

(e) If an owner or operator uses separate mechanisms or combinations of mechanisms for different petroleum underground storage tanks, the annual aggregate coverage required shall be based on the number of tanks covered by each such separate mechanism or combination of mechanisms.

(f) The amounts of coverage required under this section exclude legal defense costs.

§ 280.93 Allowable mechanisms and combinations of mechanisms.

(a) Subject to the limitations of paragraph (b) of this section, an owner or operator may use any one or combination of the mechanisms listed in §§ 280.94–280.102 to demonstrate financial responsibility under this subpart for one or more underground storage tanks.

(b) An owner or operator may use a guarantee, indemnity contract, or surety bond to establish financial responsibility only if the Attorney General(s) of the State(s) in which the underground storage tanks are located has (have) submitted a written statement to EPA that a guarantee, indemnity contract, or surety bond executed as described in this section is a legally valid and enforceable obligation in that State.
§ 280.94 Financial test of self-insurance.

(a) An owner or operator, guarantor, or indemnitor may satisfy the requirements of § 280.92 by passing a financial test of self-insurance that conforms to the requirements of this section. To pass the financial test of self-insurance, the owner or operator, guarantor, or indemnitor must meet the criteria of paragraphs (b)(1), (b)(2), and (b)(3)(i) or (b)(3)(ii), and (b)(4) of this section based on year-end financial statements for its latest completed fiscal year.

(b)(1) The owner or operator, and/or guarantor, and/or indemnitor must have a tangible net worth of at least 10 times:

(i) The total of the applicable aggregate amount required by § 280.92(b), based on the number of underground storage tanks for which a financial test is used to demonstrate financial responsibility to EPA under this section or to a State under a State program authorized by EPA under 40 CFR Part 281;

(ii) The sum of the current closure and post-closure care cost estimates and amount of liability coverage for which a financial test is used to demonstrate financial responsibility to EPA under 40 CFR 284.101, 284.143, 284.145, 285.143, and 285.145 and 40 CFR 264.147 and 265.147 or to a State under a State program authorized by EPA under 40 CFR Part 271; and

(iii) The sum of current plugging and abandonment cost estimates for which a financial test is used to demonstrate financial responsibility to EPA under 40 CFR 284.101, 284.143, 284.145, 265.143 and 265.147 or to a State under a State program authorized by EPA under 40 CFR Part 145.

(2) The owner or operator, and/or guarantor, and/or indemnitor must have a tangible net worth of at least $10 million.

(3) The owner or operator, and/or guarantor, and/or indemnitor must either:

(i) File financial statements annually with the SEC; or

(ii) Report the firm’s tangible net worth to Dun and Bradstreet, and Dun and Bradstreet must have assigned the firm a financial strength rating of 4A or 5A.

(4) The firm’s year-end financial statement, if independently audited, cannot include an adverse auditor’s opinion or a disclaimer of opinion.

To demonstrate that it meets this test, the chief financial officer of the owner or operator, and/or guarantor, and/or indemnitor must sign, within 90 days of the close of each fiscal year, a letter worded exactly as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Letter From Chief Financial Officer

I am the chief financial officer of [insert: name and address of the owner or operator, and/or guarantor, and/or indemnitor]. This letter is in support of the use of [the financial test of self-insurance, and/or guarantee and/or indemnity contract] to demonstrate financial responsibility for [insert “taking corrective action” and/or “compensating third parties for bodily injury and property damage caused by” (insert: “sudden accidental releases” and/or “nonseemly accidental releases”)] in the amount of at least [insert dollar amount] per occurrence and [insert dollar amount] annual aggregate arising from operating the underground storage tank(s) indicated below.

The following underground storage tanks at the following facilities are covered by this financial test or a financial test under an authorized State program by this owner or operator, guarantor, or indemnitor [list for each tank: the tank identification number provided in the notification submitted pursuant to 40 CFR 280.22, or the corresponding State requirement, the name and address of facility where each tank is located, and whether each tank is covered by this financial test or a financial test under a State program authorized under 40 CFR Part 281].

A financial test, guarantee, or indemnity is also being used by this owner or operator, and/or guarantor, and/or indemnitor to demonstrate evidence of financial responsibility in the following amounts under other EPA regulations or State programs authorized by EPA under 40 CFR Parts 271 and 145:

<table>
<thead>
<tr>
<th>EPA Regulation</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closure (§§ 264.143 and 265.143)</td>
<td>$</td>
</tr>
<tr>
<td>Post-Closure Care (§§ 264.145 and 265.145)</td>
<td>$</td>
</tr>
<tr>
<td>Liability Coverage (§§ 264.147 and 285.147)</td>
<td>$</td>
</tr>
<tr>
<td>Corrective Action (§ 284.101)</td>
<td>$</td>
</tr>
<tr>
<td>Plugging and Abandonment (§ 144.63)</td>
<td>$</td>
</tr>
</tbody>
</table>

Authorized State Programs:

| Closure | $ |
| Post-Closure Care | $ |
| Liability Coverage | $ |
| Corrective Action | $ |
| Plugging and Abandonment | $ |

Total $ |

This [owner or operator, and/or guarantor, and/or indemnitor] (insert: "has" or "has not") filed financial statements with the Securities and Exchange Commission (SEC) for the latest fiscal year.

This [owner or operator, and/or guarantor, and/or indemnitor] (insert: "has" or "has not") provided financial information to Dun and Bradstreet and received a financial strength rating of 4A and 5A.

This [owner or operator, and/or guarantor, and/or indemnitor] has not received an adverse opinion or a disclaimer of opinion from an independent auditor on his financial statements for the latest completed fiscal year.

[Fill in the following information. Tangible net worth is to be derived from the year-end financial statements of the owner or operator, and/or guarantor, and/or indemnitor for the latest completed fiscal year.]

1. Amount of annual aggregate coverage to be demonstrated based on the number of tanks identified above

2. Amount of closure and post-closure care costs, liability coverage, and plugging and abandonment costs covered by a financial test

3. Sum of line 1 and line 2

4. Tangible net worth

5. Is line 4 at least 10 times line 3

I hereby certify that the wording of this letter is identical to the wording specified in 40 CFR 280.94(c) as such regulations were constituted on the date shown immediately below.

[Signature]
[Name]
[Title]
[Date]

(d) If an owner or operator, guarantor, or indemnitor using the test to provide financial assurance fails to meet the requirements of the financial test at the end of any fiscal year, the owner or operator, must obtain alternate coverage within 120 days of the end of the fiscal year.

(e) The Regional Administrator may require reports of financial condition at any time from the owner or operator, guarantor, or indemnitor. If the Regional Administrator finds, on the basis of such reports or other information, that the owner or operator, guarantor, or indemnitor no longer meets the financial test requirements, the owner or operator must obtain alternate coverage within 120 days of the end of the fiscal year.

(f) If the owner or operator, fails to obtain alternate coverage by the end of the 120-day or 30-day period, the owner or operator must notify the Regional Administrator of such failure.

§ 280.95 Guarantee.

(a) An owner or operator may satisfy the requirements of § 280.92 by obtaining a guarantee that conforms to the requirements of this section. The guarantor must be:

(1) A firm that (i) possesses a controlling interest in the owner or operator;
(ii) Possesses a controlling interest in a firm described under (1)(i); or,
(iii) Is controlled through stock ownership with a common parent firm that possesses a controlling interest in the owner or operator; or,
(2) A firm engaged in a substantial business relationship with the owner or operator and issuing the guarantee as an act incident to that business relationship.

(b) Within 90 days of the close of each fiscal year the guarantor must demonstrate that it meets the financial test criteria of § 280.94 based on year-end financial statements for the latest completed fiscal year by completing the letter from the chief financial officer described in § 280.94(c) and must deliver the letter to the owner or operator. If the guarantor fails to meet the requirements of the financial test at the end of any fiscal year, within 90 days of such failure, the guarantor shall send by certified mail, before cancellation or nonrenewal of the guarantee, notice to the owner or operator. In this event, the guarantee will terminate no less than 120 days from the date of receipt of the notice by the owner or operator. The guarantee will terminate 90 days of the close of each fiscal year; the indemnitor must deliver the letter to the owner or operator. In this event, the guarantee will terminate no less than 120 days from the date the owner or operator receives the notification, as evidenced by the return receipt. The owner or operator must obtain alternate coverage before such termination.

(c) The guarantee must be worded as follows, and any instructions in brackets are to be replaced with the relevant information and the brackets deleted:

Guarantee

Guarantee made this [date] by [name of guaranty entity], a business entity organized under the laws of the State of [name of State], herein referred to as guarantor, to the United States Environmental Protection Agency (EPA) and to any and all third parties, and obligees, on behalf of [name of person signing] as [name of person signing] [name of person signing] of our subsidiary] (if guarantor is corporate parent of the owner or operator); or "On behalf of our related firm] (if guarantor is a related firm of the owner or operator); or "On behalf of our business relationship with] (if guarantor is providing the guarantee as an incident to a substantial business relationship with owner or operator) [owner or operator] A guarantor guarantees to EPA and to any and all third parties that:

In the event that the [owner or operator] fails to provide alternate coverage within 60 days after receipt of a notice of cancellation for this guarantee and the Regional Administrator has determined or suspects that a release has occurred at an underground storage tank covered by this guarantee, the guarantor, upon instructions from the Regional Administrator, shall fund a standby trust fund in accordance with the provisions of 40 CFR § 280.108, in an amount not to exceed the coverage limits specified above.

In the event that the Regional Administrator determines that [owner or operator] has failed to perform corrective action for releases arising out of the operation of the above-identified tank(s) in accordance with 40 CFR Part 280, Subpart F, the guarantor upon written instructions from the Regional Administrator shall fund a standby trust in accordance with the provisions of 40 CFR § 280.108, in an amount not to exceed the coverage limits specified above.

In the event that [owner or operator] fails to satisfy a judgment or award based on a determination of liability for bodily injury or property damage to third parties caused by ["sudden" and/or "nonsudden"] accidental releases arising from the operation of the above-identified tank(s), or fails to pay an amount agreed to in settlement of a claim arising from or alleged to arise from such injury or damage, the guarantor, upon written instructions from the Regional Administrator, will fund a standby trust fund in accordance with the provisions of 40 CFR § 280.108 to satisfy such judgment(s), award(s), or settlement agreement(s) up to the limits of coverage specified above.

Guarantor agrees that if, at the end of any fiscal year before cancellation of this guarantee, the guarantor fails to meet the financial test criteria of 40 CFR § 280.94(b), guarantor shall send within 90 days of such failure, by certified mail, notice to [owner or operator]. The guarantor will terminate 120 days from the date of the receipt of notice by [owner or operator], as evidenced by the return receipt.

Guarantor agrees to notify [owner or operator] by certified mail of any voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming guarantor as debtor, within 10 days after commencement of the proceeding.

Guarantor agrees to remain bound under this guarantee notwithstanding any modification or alteration of any obligation of [owner or operator] pursuant to 40 CFR Part 280. The guarantor agrees to remain bound under this guarantee for so long as [owner or operator] must comply with the applicable financial responsibility requirements of 40 CFR Part 280, Subpart F for the above-identified tank(s), except that guarantor may cancel this guarantee by sending notice by certified mail to the [owner or operator], such cancellation to become effective no earlier than 120 days after receipt of such notice by [owner or operator], as evidenced by the return receipt.

Guarantor expressly waives notice of acceptance of this guarantee by EPA, by any or all third parties, or by [owner or operator]. I hereby certify that the wording of this guarantee is identical to the wording specified in 40 CFR § 280.105(c) as such regulations were constituted on the effective date.

Effective date: ____________________________

[Name of Guarantor]
[Title of person signing]
[Address of person signing]

(d) The owner or operator who uses a guarantee to satisfy the requirements of § 280.92 must also establish a standby trust fund at the same time that the guarantee is obtained. Under the terms of the guarantee, all amounts paid by the guarantor under the guarantee will be deposited directly into the standby trust fund in accordance with instructions from the Regional Administrator under § 280.108. This standby trust fund must meet the requirements specified in § 280.103.

§ 280.96 Indemnity contract.

(a) An owner or operator may satisfy the requirements of § 280.92 by obtaining an indemnity contract that conforms to the requirements of this section. The indemnitor must be a firm engaged in a substantial business relationship with the owner or operator and must issue the indemnity as an act incident to that business relationship.

(b) Within 90 days of the close of each fiscal year, the indemnitor must demonstrate that it meets the financial test criteria of § 280.94 based on year-end financial statements for the latest completed fiscal year by completing the letter from the chief financial officer described in § 280.94(c) and must deliver the letter to the owner or operator. If the indemnitor fails to meet the requirements of the financial test at the end of any fiscal year, within 90 days of such failure the indemnitor shall send by certified mail, before cancellation or nonrenewal of the indemnity contract, notice to the owner or operator. In this event, the indemnity contract will terminate 120 days from the date the owner or operator receives the notice, as evidenced by the return receipt.

I hereby certify that the wording of this indemnity contract is identical to the wording specified in 40 CFR § 280.95 as such regulations were constituted on the effective date.
indemnitor, and [name of owner or operator] of [address], a business organized under the laws of the State of [insert State], herein referred to as indemnitee and the brackets deleted:

Contract for Indemnity

Agreement made this [date] between [name of indemnifying entity] of [address], as indemnitee, and [name of owner or operator] of [address], herein referred to as indemnitor, and [name of owner or operator] of [address], herein referred to as indemnitee. In consideration of ["the business relationship between indemnitor and indemnitee" and "the sum of [insert dollar amount], receipt of which is acknowledged,"] it is hereby agreed:

1. Indemnitor meets or exceeds the financial test criteria of 40 CFR 280.94(b) and agrees to comply with the requirements specified in 40 CFR 280.95(b).

2. Indemnitor undertakes to indemnify indemnitee from any and all costs, up to the limits specified in this agreement, of ["taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by either "sudden accidental releases" or "nonsudden accidental releases" or "accidental releases" if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location] arising from operating the underground storage tank(s) identified below that indemnitee may suffer as a result of claims, demands, costs, or judgments against it arising from operating the following underground storage tanks:

- For each tank: the tank identification number provided in the notification submitted pursuant to 40 CFR 280.22, or the corresponding State requirement, and the name and address of the facility where each tank is located.

3. Indemnitor's liability under this contract shall not exceed [insert dollar amount] per occurrence and [insert dollar amount] annual aggregate.

4. Indemnitor's liability under this agreement shall begin on [date] and shall continue until [date at least one year later], but such expiration date shall be automatically extended for a period of [at least one year] on [date] and on each successive expiration date, unless, at least 120 days before the current expiration date, indemnitor notifies indemnitee by certified mail, return receipt requested, that indemnitor will not extend the indemnity beyond the current expiration date.

5. Indemnitee agrees to notify indemnitor within 10 calendar days, by registered mail, return receipt requested, at indemnitor's address, of any claim(s) made against indemnitee on or against indemnitee on its obligations indemnified against.

6. Indemnitor agrees to discharge its obligation under this contract by depositing, within 90 calendar days, by registered mail, return receipt requested, at indemnitor's address, any claim(s) made against indemnitee on or against indemnitee on its obligations indemnified against.

(7) Indemnitor agrees to notify [owner or operator] by certified mail of a voluntary or involuntary petition under Title 11 (Bankruptcy), U.S. Code, naming indemnitee as debtor, within 10 days after commencement of the proceeding.

(8) Indemnitor agrees to remain bound under this contract notwithstanding any modification or alteration of any obligation of [owner or operator] pursuant to 40 CFR Part 280.

I hereby certify that the wording of the indemnity is identical to the wording specified in 40 CFR 280.96(c) as such regulations were constituted on the effective date.

(Name of indemnitee)
[Authorized signature for indemnitee]
[Address of (Insurer or Risk Retention Group),] [State of] [List of all applicable state requirements], and the brackets deleted:

$280.97 Insurance.

(a) An owner or operator may satisfy the requirements of § 280.92 by obtaining liability insurance that conforms to the requirements of this section. Such insurance may be in the form of a primary insurance policy or an endorsement to an existing insurance policy.

(b) Each insurance policy must be amended by an endorsement worded as specified in paragraph (b)(1) of this section (except that instructions in brackets are to be replaced with the relevant information and the brackets deleted) or evidenced by a certificate of insurance worded as specified in paragraph (b)(2) of this section (except that instructions in brackets are to be replaced with the relevant information and the brackets deleted):

(1) ENDORSEMENT

Name: [name of each covered location]
Address: [address of each covered location]
Policy Number:
Period of Coverage: [current policy period]
Name of [Insurer or Risk Retention Group]:
Address of [Insurer or Risk Retention Group]:
Name of Insured:
Address of Insured:

Endorsement:

1. [Name of Insurer or Risk Retention Group], the ["Insurer" or "Group"], as identified above, hereby certifies that it has issued liability insurance covering the following underground storage tank(s):

- For each tank: the tank identification number provided in the notification submitted pursuant to 40 CFR 280.22, or the corresponding State requirement, and the name and address of the facility where each tank is located.

2. The ["Insurer" or "Group"] further certifies the following with respect to the insurance described in Paragraph 1:

a. Bankruptcy or insolvency of the insured shall not relieve the ["Insurer" or "Group"] of its obligations under the policy to which this endorsement is attached.

b. The ["Insurer" or "Group"] is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the ["Insurer" or "Group"]. This provision does not apply if the amount of deductible is less than $50,000.

c. Any other termination of the insurance by the ["Insurer" or "Group"] will be effective only upon written notice and only after the expiration of 120 days after a copy of such written notice is received by the insured.

d. Cancellation of the insurance by the ["Insurer" or "Group"] will be effective only upon written notice and only after the expiration of 90 days after a copy of such written notice is received by the insured.

f. The insurance covers claims for any occurrence that commenced during the term of the policy that is discovered and reported to the ["Insurer" or "Group"] within one year since the occurrence began.
of the effective date of the expiration, termination, or cancellation of the policy.

I hereby certify that the wording of this instrument is identical to the wording in 40 CFR 280.97(b)(1) and that the "[Insurer] or "Group") is "licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States" or "chartered and licensed as a Risk Retention Group in at least one State and authorized to operate in each State where an underground storage tank covered by this policy is located".

[Signature of authorized representative of insurer or Risk Retention Group]

[Type name]

[Title]. Authorized Representative of [name of Insurer or Risk Retention Group]

[Address of Representative]

2. CERTIFICATE OF INSURANCE

Name: [name of each covered location]

Address: [address of each covered location]

Policy Number:

Endorsement: [if applicable]

Period of Coverage: [current policy period]

Name of [Insurer of Risk Retention Group]: [Address of Insurer or Risk Retention Group]

Name of Insured: [Name of each covered location]

Address of Insured:

Certification: 1. [Name of Insurer or Risk Retention Group], the "Insurer" or "Group"), as identified above, hereby certifies that it has issued liability insurance covering the following underground storage tank(s):

[List for each tank: the tank identification number provided in the notification submitted pursuant to 40 CFR 280.22, or the corresponding State requirement, and the name and address of the facility where each tank is located.]

for [insert: "taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "nonsudden accidental releases" or "accidental releases" - if coverage is different for different tanks or locations, indicate the type of coverage applicable to each tank or location] arising from operating the underground storage tank(s) identified above.

The limits of liability are [insert the dollar amount of the "each occurrence" and "annual aggregate" limits of the insurer's liability: if the amount of coverage is different for different types of coverage or for different underground storage tanks or locations, indicate the amount of coverage for each type of coverage and/or for each underground storage tank or location], exclusive of legal defense costs. This coverage is provided under [policy number] which was issued on [date]. The effective date of said [policy] is [date].

2. The ["Insurer" or "Group"] further certifies the following with respect to the insurance described in Paragraph 1:

a. Bankruptcy or insolvency of the insured shall not relieve the ["Insurer" or "Group"] of its obligations under the policy to which the certificate applies.

b. The ["Insurer" or "Group"] is liable for the payment of amounts within any deductible applicable to the policy, with a right of reimbursement by the insured for any such payment made by the ["Insurer" or "Group"]. This provision does not apply with respect to that amount of any deductible for which coverage is demonstrated under another mechanism or combination of mechanisms as specified in 40 CFR 280.93-120.102.

c. Whenever requested by a Regional Administrator of the U.S. Environmental Protection Agency (EPA), the ["Insurer" or "Group"] agrees to furnish to the Regional Administrator a signed duplicate original of the policy and all endorsements.

d. Cancellation of the insurance by the ["Insurer" or "Group"] will be effective only upon written notice and only after the expiration of 120 days after a copy of such written notice is received by the insured.

e. Any other termination of the insurance ["Insurer" or "Group"] will be effective only upon written notice and only after the expiration of 90 days after a copy of such written notice is received by the insured.

f. The insurance covers claims for any occurrence that commenced during the term of the policy that is discovered and reported to the ["Insurer" or "Group"] within one year of the effective date of the expiration, termination, or cancellation of the policy.

I hereby certify that the wording of this instrument is identical to the wording in 40 CFR 280.97(b)(2) and that the ["Insurer" or "Group"] is "licensed to transact the business of insurance, or eligible to provide insurance as an excess or surplus lines insurer, in one or more States" or "chartered and licensed as a Risk Retention Group in at least one State and authorized to operate in each State where an underground storage tank covered by this policy is located".

[Signature of authorized representative of insurer]

[Type name]

[Title]. Authorized Representative of [name of Insurer or Risk Retention Group]

[Address of Representative]

3. PERFORMAACE BOND

Date bond executed:

Period of coverage:

Principal: [legal name and business address of owner or operator]

Type of organization: [insert "individual," "joint venture," "partnership," or "corporation"

State of Incorporation (if applicable):

Surety(s): [name(s) and business address(es)]

Scope of Coverage: [List for each tank: the tank identification numbers provided in the notification(s) submitted pursuant to 40 CFR 280.22, or the corresponding State requirements, the name and address of the facility where each tank is located; and the coverage guaranteed by the bond: "taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "nonsudden accidental releases" or "accidental releases" - "arising from operating the underground storage tank".]

Penal sums of bond:

Per occurrence $__________

Annual aggregate $__________

Surety's bond number:

Know All Persons by These Presents, that we, the Principal and Surety(ies), hereinafter are firmly bound to the Environmental Protection Agency, in the above penal sums for the payment of which we bind ourselves, our heirs, executors, administrators, successors, and assigns jointly and severally; provided that, where the Surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sums "jointly and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of such sums only as is set forth opposite the name of such Surety, but if no limit of liability is indicated, the limit of liability shall be the full amount of the penal sums.

Whereas said Principal is required under Subtitle I of the Resource Conservation and Recovery Act (RCRA), as amended, to provide financial assurance for [insert: "taking corrective action" and/or]
The Surety(ies) hereby waive(s), in accordance with 40 CFR Part 280, Subpart F and the Regional Administrator's instructions for, and/or "compensating injured third parties for bodily injury and property damage caused by" either "sudden" or "non-sudden" accidental releases arising from operating the tank(s) identified above, if the Principal has failed to provide alternate financial assurance, as specified in 40 CFR Part 280, Subpart I, within 120 days after the date the notice of cancellation is received by the Principal from the Surety(ies), then this obligation shall be null and void; otherwise it is to remain in full force and effect.

The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to fulfill the conditions described above.

Upon notification by the Regional Administrator that the Principal has failed to "take corrective action, in accordance with 40 CFR Part 280 and the Regional Administrator's instructions," and/or "compensate injured third parties as such", the Surety(ies) shall either perform "corrective action in accordance with 40 CFR Part 280 and the Regional Administrator's instructions," or place funds in an amount up to the annual aggregate penal sum into the standby trust fund as directed by the Regional Administrator under 40 CFR 280.108.

Upon notification by the Regional Administrator that the Principal has failed to provide alternate financial assurance within 60 days after the date the notice of cancellation is received by the Principal from the Surety(ies) and that the Regional Administrator has determined or suspects that a release has occurred, the Surety(ies) shall place funds in an amount not exceeding the annual aggregate penal sum into the standby trust fund as directed by the Regional Administrator under 40 CFR 280.108.

The Surety(ies) hereby waive(s), notification of amendments to applicable laws, statutes, rules, and regulations and agrees that notification of amendment shall in any way alleviate its (their) obligation on this bond.

The liability of the Surety(ies) shall not be discharged by any payment or succession of payments hereunder, unless and until such payment or payment shall amount in the annual aggregate to the penal sum of the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said annual aggregate penal sum.

The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the Principal, provided, however, that cancellation shall not occur during the 120 days beginning on the date of receipt of the notice of cancellation by the Principal, as evidenced by the return receipt.

The Principal may terminate this bond by sending written notice to the Surety(ies). In Witness Thereof, the Principal and Surety(ies) have executed this Bond and have affixed their seals on the date set forth above.

The persons whose signatures appear below hereby certify that they are authorized to execute this surety bond on behalf of the Principal and Surety(ies) and that the wording of this surety bond is identical to the wording specified in 40 CFR 280.99(b) as such regulations were constituted on the date this bond was executed.

PRINCIPAL
[Signature(s)]
[Name(s)]
[Title(s)]
[Corporate seal]

CORPORATE SURETY(IES)
[Name and address]
State of Incorporation: [State]
Liability limit: $ [insert dollar amount]
[Signature(s)]
[Name(s) and title(s)]
[Corporate seal]

For every co-surety, provide signature(s), corporate seal, and other information in the same manner as for Surety above.

Bond premium $ [insert dollar amount]

(c) Under the terms of the bond, the surety will become liable on the bond obligation when the owner or operator fails to perform as guaranteed by the bond. In all cases, the surety's liability is limited to the per-occurrence and aggregate penal sums.

(d) The owner or operator who uses a surety bond to satisfy the requirements of § 280.92 must also establish a standby trust fund at the same time the surety bond is established. Under the terms of the bond, all amounts paid by the surety under the bond will be deposited directly into the standby trust fund in accordance with instructions from the Regional Administrator under § 280.108. This standby trust fund must meet the requirements specified in § 280.103.

§ 280.100 Letter of credit.
(a) An owner or operator may satisfy the requirements of § 280.92 by obtaining an irrevocable standby letter of credit that conforms to the requirements of this section. The issuing institution must be an entity that has the authority to issue letters of credit in this bond, the Surety(ies) shall

IRREVOCABLE STANDBY LETTER OF CREDIT
[Name and address of issuing institution]
[Name and address of Regional Administrator(s)]

Dear Sir or Madam: We hereby establish our Irrevocable Standby Letter of Credit No. [insert number] as follows:

1. The letter of credit may be drawn on to cover "taking corrective action and/or "compensating injured third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "non-sudden accidental releases" or "accidental releases" arising from operating the underground storage tank(s) identified below in the amount of [in words] $ [insert dollar amount] per occurrence and [in words] $ [insert dollar amount] annual aggregate:

2. "Last for each tank: the tank identification number provided in the notification submitted pursuant to 40 CFR 280.22, or the corresponding State requirement, and the name and address of facility where each tank is located. If coverage is different for different tanks or locations, the type of coverage applicable to each tank or location must be indicated.

This letter of credit is effective as of [date] and shall expire on [expiration date], but such expiration date shall be automatically extended for a period of [at least the original term] on [expiration date] and on each successive expiration date, unless, at least 120 days before the current expiration date, we notify [owner or operator] by certified mail that we have decided not to extend this letter of credit beyond the current expiration date. In the event that [owner or operator] is so notified, any unused portion of the credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by [owner or operator], as shown on the signed return receipt.

Whenever this letter of credit is drawn on under and in compliance with any of the requirements of this credit, we shall honor such draft upon presentation to us, and we shall deposit the amount of the draft directly into the standby trust fund of [owner's or operator's name] in accordance with your instructions.

We certify that the wording of this letter of credit is identical to the wording specified in 40 CFR 280.100(b) and such regulations were constitutes on the date shown immediately below.

[Signature(s) and title(s) of official(s) of issuing institution] [Date]
This credit is subject to [insert "the most recent edition of the Uniform Customs and Practice for Documentary Credits, published by the International Chamber of Commerce," or "the Uniform Commercial Code"]).

(c) An owner or operator who uses a letter of credit to satisfy the requirements of § 280.92 must also establish a standby trust fund at the same time the letter of credit is established. Under the terms of the letter of credit, all amounts paid pursuant to a draft by the Regional Administrator will be deposited by the issuing institution directly into the standby trust fund in accordance with instructions from the Regional Administrator under § 220.108. This standby trust fund must meet the requirements specified in § 280.103.

(d) The letter of credit must be irrevocable with a term specified by the issuing institution. The letter of credit must provide that credit be automatically renewed for the same term, unless, at least 120 days before the current expiration date, the issuing institution notifies the owner or operator by certified mail of its decision not to renew the letter of credit. Under the terms of the letter of credit, the 120 days will begin on the date when the owner or operator receives the notice, as evidenced by the return receipt.

§ 280.101 Use of State-required mechanism.

(a) For underground storage tanks located in a State where EPA is administering the requirements of this subpart, where the State requires owners or operators of underground storage tanks to demonstrate financial responsibility for taking corrective action and/or for compensating third parties for bodily injury and property damage, an owner or operator may use a State-required financial mechanism to meet the requirements of § 280.92 if the Regional Administrator determines that the State mechanism is at least equivalent to the financial mechanisms specified in this subpart.

(b) The Regional Administrator will evaluate the equivalency of a State-required mechanism principally in terms of: certainty of the availability of funds for taking corrective action and/or for compensating third parties; the amount of funds that will be made available; and the types of costs covered. The Regional Administrator may also consider other factors as he/she deems appropriate.

(c) The State, an owner or operator, or any other interested party may submit to the Regional Administrator a written petition requesting that one or more of the State-required mechanisms be considered acceptable for meeting the requirements of § 280.92. The submission must include copies of the appropriate State statutory and regulatory requirements and must show the amount of funds for corrective action and/or for compensating third parties assured by the mechanism(s). The Regional Administrator may require the petitioner to submit additional information as is deemed necessary to make this determination.

(d) Any petition under this section may be submitted on behalf of all of the State's underground storage tank owners and operators.

(e) The Regional Administrator will notify the petitioner of his/her determination regarding the mechanism's acceptability in lieu of financial mechanisms specified in this subpart. Pending this determination, the owners and operators using such mechanism will be deemed to be in compliance with the requirements of § 280.92 for underground storage tanks located in the State for the amounts and types of costs covered by such mechanisms.

§ 280.102 State fund or other State assurance.

(a) An owner or operator may satisfy requirements of § 280.92 for USTs located in a State which assures that moneys will be available from a State fund to cover costs included in § 280.92 or otherwise assures that such costs will be paid if the Regional Administrator determines that the State's assurance is at least equivalent to the financial mechanisms specified in this subpart. The Regional Administrator will evaluate the equivalency of a State fund or other State assurance principally in terms of: certainty of the availability of funds for taking corrective action and/or for compensating third parties; the amount of funds that will be made available; and the types of costs covered. The Regional Administrator may also consider other factors as he/she deems appropriate.

(b) The State must submit to the Regional Administrator a description of the State fund or other State assurance to be supplied as financial assurance, along with a list of the classes of underground storage tanks to which the funds may be applied. The Regional Administrator may require the State to submit additional information as is deemed necessary to make a determination regarding the acceptability of the State fund or other State assurance. Pending the determination by the Regional Administrator, the owner or operator of a covered class of USTs will be deemed to be in compliance with the requirements of § 280.92 for the amounts and types of costs covered by the State fund or other State assurance.

(d) The Regional Administrator will notify the State of his/her determination regarding the acceptability of the State's fund or other assurance in lieu of financial mechanisms specified in this subpart. Within 60 days after the Regional Administrator notifies a State that a State fund or other State assurance is acceptable, the State must provide to each owner or operator for which it is assuming financial responsibility a letter or certificate describing the nature of the State's assumption of responsibility. The letter or certificate from the State must include, or have attached to it, the following information: the facility's name and address and the amount of funds for corrective action and/or for compensating third parties that is assured by the State. The owner or operator must maintain this letter or certificate on file as proof of financial responsibility in accordance with § 280.107(b)(5).

§ 280.103 Standby trust fund.

(a) An owner or operator using any one of the mechanisms authorized by §§ 280.95, 280.96, 280.99, or 280.100 must establish a standby trust fund at the same time the mechanism is established. The trust fund must be an entity that has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal agency or an agency of the State in which the fund is established.

(b)(1) The standby trust agreement must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

**TRUST AGREEMENT**

Trust agreement, the "Agreement," entered into as of [date] by and between [name of the owner or operator], a [name of State] [insert "corporation," "partnership," "association," or "proprietorship"], the "Grantor," and [insert "Incorporated in the State of ___," or "a national bank"], the "Trustee.

Whereas, the Grantor has elected to establish either a guarantee, indemnity
contract, surety bond, or letter of credit to provide all or part of such financial assurance for the underground storage tanks identified herein and is required to establish a standby trust fund able to accept payments from one of the instruments listed.

Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee.

Now, therefore, the Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:
(a) The term “Grantor” means the owner or operator who enters into this Agreement and any successors or assigns of the Grantor.
(b) The term “Trustee” means the Trustee who enters into this Agreement and any successor Trustee.

Section 2. Identification of the Financial Assurance Mechanism. This Agreement pertains to the financial assurance mechanism, either a guarantee, indemnity under a surety bond, or letter of credit, from which the standby trust fund is established to receive payments.

Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a trust fund, the “Fund, for the benefit of the Grantor and the Trustee hereby establish a trust fund, the Funds (as defined herein). The term “Fund” means the trust fund initially as a standby to receive payments necessary to discharge any liability for the payment of interest thereon. The Trustee shall discharge its duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; as such:

(i) Securities or other obligations of the Grantor, or any other owner or operator of the tanks, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;
(ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government; and
(iii) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 4. Payment for [“Corrective Action” and/or “Third-Party Liability Claims”]. The Trustee shall make payments from the Fund as the Regional Administrator shall direct, in writing, to provide for the payment of the costs of [insert: “taking corrective action” and/or “compensating third parties for bodily injury and property damage caused by” either “sudden accidental releases” or “unauthorized accidental releases”] arising from the tanks covered by the financial assurance mechanism identified in this Agreement. The Trustee shall reimburse the Grantor, or other persons as specified by the Regional Administrator, from the Fund for corrective action expenditures and/or third-party liability claims as long as the Regional Administrator shall direct in writing. Upon receipt of a refund, the Trustee shall refund to the Grantor such amounts as the Regional Administrator specifies in writing. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash and securities acceptable to the Trustee.

Section 6. Trustee Management. The Trustee shall invest and reinvest the principal and income of the Fund and keep the Fund invested in a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines which the Grantor may communicate in writing to the Trustee from time to time, participating, to the provisions of this Section. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; as such:

(i) Securities or other obligations of the Grantor, or any other owner or operator of the tanks, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;
(ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government; and
(iii) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:
(a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and
(b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretions conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:
(a) To exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition; and
(b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted.

(c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held in Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository

(d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or State government; and
(e) To compromise or otherwise adjust all claims in favor of or against the Grantor, or any other owner or operator of the tanks, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a State government;
(ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or State government; and
(iii) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of the Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 10. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to the Grantor, with respect to any questions arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 11. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for its services as agreed upon in writing from time to time with the Grantor.

Section 12. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee, but such resignation or replacement shall not be effective until the Grantor has appointed a successor trustee and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in writing sent to the Grantor and the present
Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 8.

Section 13. Instructions to the Trustee. All orders, requests, and instructions of the Grantor to the Trustee shall be in writing, signed by such persons as are designated in the attached Schedule B or such other designees as the Grantor may designate by amendment to Schedule B. The Trustee shall be fully protected in acting without inquiry in accordance with the Grantor’s orders, requests, and instructions. All orders, requests, and instructions of the Regional Administrator to the Trustee shall be in writing, signed by the Regional Administrator, and the Trustee shall act and be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of the Grantor or the Regional Administrator hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from the Grantor and/or the Regional Administrator, except as provided herein.

Section 14. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by the Grantor and the Trustee, or by the Trustee and the Regional Administrator if the Grantor ceases to exist.

Section 15. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 14, this Trust shall be irrevocable and shall continue until terminated at the written direction of the Grantor and the Trustee, or by the Trustee and the Regional Administrator, if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered to the Grantor.

Section 16. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by the Grantor or the Regional Administrator issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by the Grantor, from and against any personal liability to which the Trustee may be subjected by reason of any act or omission in its official capacity including all expenses reasonably incurred in its defense in the event the Grantor fails to provide such defense.

Section 17. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the State of [insert name of State].

Section 18. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

In Witness whereof the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals (if applicable) to be hereunto affixed and attested as of the date first above written: The parties below certify that the writing of this Agreement is identical to the wording specified in 40 CFR 280.103(b)(1) as such regulations were constituted on the date first above written.

[Signature of Grantor]
[Title]
Attest:
[Title]
[Seal]
[Signature of Trustee]
Attest:
[Title]
[Seal]

(2) The standby trust agreement must be accompanied by a formal certification of acknowledgment similar to the following. State requirements may differ on the proper content of this acknowledgment.

State of County of

On this [date], before me personally came [owner or operator] to me known, who, being by me duly sworn, did depose and say that she/he resides at [address], that she/he is [title] of [corporation], the corporation described in and which executed the above instrument; that she/he knows the seal of said corporation; that the seal affixed to such instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation; and that she/he signed her/his name thereto by like order.

[Signature of Notary Public]

§ 280.105 Reporting by owner or operator.

(a) An owner or operator must submit the appropriate forms listed in § 280.107(b) documenting current evidence of financial responsibility to the Regional Administrator:

(1) When the owner or operator notifies the Regional Administrator of the installation of a new underground storage tank under § 280.22;

(2) Within 30 days after the owner or operator identifies a known or suspected release from an underground storage tank required to be reported under § 280.74;

(3) If the owner or operator fails to obtain alternate coverage as required by this subpart, within 30 days after the owner or operator receives notice of:

(i) Commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming a provider of financial assurance as a debtor;

(ii) Suspension or revocation of the authority of a provider of financial assurance to issue a financial assurance mechanism;

(iii) Failure of a guarantor or indemnitor to meet the requirements of the financial test;

(iv) Other incapacity of a provider of financial assurance;

(4) As required by §§ 280.94(f) and 280.106(b).

(b) The Regional Administrator may require an owner or operator to submit evidence of financial assurance as described in § 280.107(b) or other information relevant to compliance with this subpart at any time.
§ 280.107 Recordkeeping.

(a) Owners or operators must maintain evidence of all financial assurance mechanisms used to demonstrate financial responsibility under this subpart for an underground storage tank until released from the requirements of this subpart under § 280.109. An owner or operator must maintain such evidence at the underground storage tank site or the owner's or operator's place of business.

(b) An owner or operator must maintain the following types of evidence of financial responsibility:

1. An owner or operator using an assurance mechanism specified in §§ 280.94–280.101 must maintain a copy of the instrument worded as specified.

2. An owner or operator using a financial test, guarantee, or indemnity contract must maintain a copy of the chief financial officer's letter based on year-end financial statements for the most recent completed fiscal year. Such evidence must be on file no later than 90 days after the close of the fiscal year.

3. An owner or operator using a guarantee, indemnity contract, surety bond, or letter of credit must maintain an originally signed duplicate of the standby trust fund agreement and copies of any amendments to the agreement.

4. An owner or operator using an insurance policy or risk retention group coverage must maintain an originally signed duplicate of the insurance policy or risk retention group coverage policy, with the endorsement or certificate of insurance and any amendments to the agreement.

5. An owner or operator covered by a State fund or other State assurance must maintain on file a copy of the letter from the State required under § 280.102(d).

6. An owner or operator using an assurance mechanism specified in §§ 280.94–280.102 must maintain an updated copy of a certification of financial responsibility worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

CERTIFICATION OF FINANCIAL RESPONSIBILITY

[Owner or operator] hereby certifies that it is in compliance with the requirements of Subpart I of 40 CFR Part 280.

The financial assurance mechanism[s] used to demonstrate financial responsibility under Subpart I of 40 CFR Part 280 is [are] as follows:

[For each mechanism, list the type of mechanism, name of issuer, mechanism number (if applicable), amount of coverage, effective period of coverage and whether the mechanism covers "taking corrective action" and/or "compensating third parties for bodily injury and property damage caused by" either "sudden accidental releases" or "non-sudden accidental releases" or "accidental releases." ]

[Signature of owner or operator]

[Name of owner or operator]

[Title]

[Date]

[Signature of witness or notary]

[Name of witness or notary]

[Date]

The owner or operator must update this certification whenever the financial assurance mechanism(s) used to demonstrate financial responsibility change.

§ 280.108 Drawing on financial assurance mechanisms.

(a) The Regional Administrator shall require the guarantor, indemnitor, surety, institution issuing a letter of credit, or, as applicable, other provider of financial assurance to place the amount of funds stipulated by the Regional Administrator, up to the limit of funds provided by the financial assurance mechanism, into the standby trust if:

1. The Regional Administrator determines that a release from an underground storage tank covered by the mechanism has occurred and so notifies the owner or operator or the owner or operator has notified the Regional Administrator pursuant to Subpart F of a release from an underground storage tank covered by the mechanism; or

2. The conditions of paragraph (b)(1) or (b)(2)(i) or (b)(2)(ii) of this section are satisfied.

(b) The Regional Administrator may draw on a standby trust fund when:

1. The Regional Administrator makes a final determination that a release has occurred and immediate or long-term corrective action for the release is needed, but the owner or operator, after appropriate notice and opportunity to comply, has not conducted corrective action as required under 40 CFR Part 280, Subpart F or

2. The Regional Administrator has received either:

(i) Certification from the owner or operator and the third-party liability claimant(s) and from attorneys representing the owner or operator and the third-party liability claimant(s) that a third-party liability claim should be paid. The certification must be worded as follows, except that instructions in brackets are to be replaced with the relevant information and the brackets deleted:

CERTIFICATION OF VALID CLAIM

[Owner or operator] hereby certifies that the owner or operator has not satisfied the judgment.

(c) If the Regional Administrator determines that the amount of corrective action costs and third-party liability claims eligible for payment under paragraph (b) of this section may exceed the balance of the standby trust fund and the obligation of the provider of financial assurance, the first priority for payment shall be corrective action costs necessary to protect human health and the environment. The Regional Administrator shall pay third-party liability claims in the order in which the Regional Administrator receives certifications under paragraph (b)(2)(i) of this section and valid court orders under paragraph (b)(2)(ii) of this section.

§ 280.109 Release from the requirements of this subpart.

(a) Except as provided in § 280.100(b), an owner or operator is no longer required to maintain financial responsibility under this subpart for an underground storage tank after the tank has been properly closed or, if corrective action is required, after the tank has been properly closed and corrective action has been completed, as required by 40 CFR Part 280, Subpart F.

(b) A Regional Administrator may require an owner or operator to maintain financial responsibility for periods beyond paragraph (a) of this section if he/she has reason to believe that a release may have occurred that
§ 280.111 Suspension of enforcement.
(a) A class of owners and operators of underground storage tanks, including owners and operators of underground storage tanks in a particular State, may obtain a suspension of enforcement of the provisions of this subpart if the class meets the requirements of this section and submits an application in compliance with this section to the Agency. Such suspension shall be for no more than 180 days. If enforcement is not suspended, the applicant class must comply with the financial responsibility requirements.

(b) An application for suspension of enforcement must demonstrate that:

1. Methods of financial responsibility satisfying the requirements of this subpart are not generally available to the class; and

2. Steps are being taken to form a risk retention group to provide coverage for the class that will satisfy the requirements of § 280.98, or

3. The State in which underground storage tanks are located is taking steps to establish a fund to provide coverage for the class satisfying the requirements of § 280.102.

(c) A class of owners and operators of underground storage tanks may obtain a renewal of the suspension for a period not exceeding 180 days. Any such class must submit an application to EPA at least 90 days prior to the expiration of a suspension or 30 days after the publication of a final decision suspending enforcement for the class, whichever is later. The application for a renewal of suspension of enforcement must demonstrate that:

1. Methods of financial responsibility satisfying the requirements of this subpart are not generally available to the class; and

2. Substantial progress has been made in establishing a risk retention group to provide coverage for the class that will satisfy the requirements of § 280.98, or

3. The formation of a risk retention group to provide coverage for the class that will satisfy the requirements of § 280.98 is not possible and the State in which the tank is located is unable or unwilling to establish a fund to provide coverage for the class satisfying the requirements of § 280.102.

(d) Each member of a class granted or seeking suspension of enforcement shall maintain in writing:

1. That the owner and operator are members of the class; and

2. If a suspension or a request for a suspension is based on efforts to form a risk retention group, proof that the owner and operator are members of an association seeking to form a risk retention group.

(e)(1) Methods of financial responsibility satisfying the requirements of this subpart will be considered not generally available to a class for that portion of coverage required under § 280.92 for which written evidence is submitted demonstrating that the class:

1. Has attempted to obtain financial assurance satisfying the requirements of this subpart from the known providers of financial assurance; or

2. Was unable to obtain financial assurance due to reasons other than the failure to meet the standard underwriting practices of insurers offering coverage acceptable under § 280.92.

(iii) Is in compliance with all other applicable requirements of Part 280 or with an enforceable compliance schedule.

(2) For owners or operators who certify that their individual net worth is less than $200,000, the class need demonstrate the general unavailability only of insurance, guarantees, or indemnity contracts.

(3) A class need not demonstrate the general unavailability of:

1. Guarantees, indemnity contracts, or surety bonds for underground storage tanks located in States where the Attorney General of the State has not certified that such a mechanism is legally valid and enforceable in that State as provided by § 280.93(a)(ii); or

2. State-required mechanisms that a Regional Administrator has not already determined meet the requirements of § 280.101; or

(iii) A State fund or other State assurance.

(f) To demonstrate that steps are being taken to form a risk retention group, the class must demonstrate that:

1. The class is an association, as evidenced by articles of incorporation, partnership agreements, or bylaws; and

2. Each member of the class has a binding financial commitment of at least $2,000 per year to the association; and

3. The association is undertaking actuarial and risk analyses to determine its capitalization requirements and the
potential premiums for risk retention group members.

g) To demonstrate that the State in which the tank is located is taking steps to establish a fund to provide coverage satisfying the requirements of § 280.102, a class must submit evidence that:

(1) Legislation establishing a State fund has been enacted and the State is in the process of making the fund operational; or

(2) If the legislature is in session, a bill to establish a State fund has been introduced and is pending; or

(3) If the legislature is not in session, an appropriate State executive agency or a State legislator intends to seek establishment of such a fund in the next legislative session.

h) To demonstrate that substantial progress has been made in establishing a risk retention group, a class must demonstrate:

(1) That steps have been taken to form a risk retention group, as provided by paragraph (d) of this section; and

(2) Except for a class whose initial suspension was based in part on a finding that a State was taking steps to establish a fund to provide coverage satisfying the requirements of § 280.102, or for a class whose composition has changed substantially since the initial suspension, that the class has formed an association that:

(i) Is taking steps toward completing actuarial and risk analyses;

(ii) Either is composed of a sufficient number of members to capitalize a risk retention group adequately or is actively seeking adequate capitalization;

(iii) Is composed of members who have each made a binding financial commitment of at least $2,000 per year to the association;

(iv) Is taking steps toward completion of an operating plan; and

(v) Is taking steps toward obtaining a charter and license as a liability insurance company under the laws of a State; and

(3) Significant progress has been made in establishing a risk retention group since the previous suspension was granted.

i) To demonstrate that forming a risk retention group is not possible, an applicant must submit written evidence documenting the steps taken in attempting to form a risk retention group, including the steps included in paragraph (h) of this section, and describing why forming a risk retention group is not possible.

j) To demonstrate that a State is unable or unwilling to establish a fund to provide coverage satisfying the requirements of § 280.102, a class must submit appropriate evidence regarding the State in which the underground storage tanks for which suspension of enforcement is sought are located.

(k) Applications for an initial suspension of enforcement or a renewal shall contain the information required in this section and shall include the class representative’s name, address, and telephone number; a precise description of the types of owners, operators, and underground storage tanks included in the class.

(l) Upon receiving an application for a suspension or a renewal of suspension, the Agency may request any additional information from any member of the class that it deems necessary to evaluate the application.

(m) After determining that an application is complete, the Agency shall publish a notice in the Federal Register announcing the Agency’s interim final decision and requesting public comment within 30 days.

(n) After the close of the 30-day comment period, the Agency will publish the final decision and a response to all comments in the Federal Register.

(o)(1) An interim final or final decision to grant or deny an initial suspension of enforcement shall be effective when published. The period of an initial suspension shall begin on the date of an interim final decision granting a suspension or the date of the final decision granting a suspension that reverses an interim final decision denying a suspension.

(2) An interim final or final decision to grant or deny a renewal of suspension shall be effective when published or upon the expiration of the previous suspension, whichever comes first. The period of a renewal of suspension shall begin on the date of the expiration of the previous suspension period.

SUMMARY

Subordinate 1 of the Resource Conservation and Recovery Act (RCRA), enacted on November 8, 1984, establishes a Federal program for the regulation of underground storage tanks. Subordinate 1 of RCRA also allows State programs containing tank standards that are no less stringent than the Federal...
Hearings will be held at the following locations:
2. Dallas—The Registry Hotel, 15201 Dallas Parkway, Dallas, Texas 75248.
3. San Francisco—The Miyako Hotel, 1625 Post Street, San Francisco, California 94015.

FOR FURTHER INFORMATION CONTACT:
RCRA/Superfund Hotline, 1-(800) 424-9346; or in Washington, DC, 202-382-3000.

SUPPLEMENTARY INFORMATION:
The contents of today's preamble are listed in the following outline:
I. Authority
II. Background
III. Summary of the Proposed Rule
A. Synopsis of Today's Proposal
B. Components of a Program Application
IV. Considerations Affecting Today's Rule
A. State Involvement in Development of the Proposal
B. Regulatory Approach to State Program Approval
V. Discussion of Significant Issues in Today's Rule
A. Adequate Enforcement of Compliance
B. Approval Procedures
C. Determination of "No Less Stringent"
D. Automatic Expiration of Interim Approval
E. Withdrawal of Approval of State Programs
VI. Relationship to Other EPA Programs
A. RCRA Hazardous Waste UST Program
B. Leaking Underground Storage Tank Petroleum Response Fund
VII. Economic and Regulatory Impacts
A. Regulatory Impact Analysis
B. Regulatory Flexibility Act
C. Paperwork Reduction Act
VIII. List of Subjects in 40 CFR Part 281

I. Authority
These regulations are proposed under sections 9003(a) and 9006 of the Solid Waste Disposal Act, as amended.

II. Background
The President signed into law the Hazardous and Solid Waste Amendments on November 8, 1984. This law amends the Resource Conservation and Recovery Act (RCRA) to add Subtitle I, which established a Federal program for the regulation of underground storage tanks.

The Federal underground storage tank (UST) program under Subtitle I has several components. Section 9002 requires each owner of a UST to notify the designated State agency of the existence of the tank and the tank age, size, type, location, and use. This notification was due on May 8, 1986, or within 30 days after an owner brings a UST into use if it is brought into use after May 8, 1986.

Section 9003(a) of Subtitle I requires EPA to promulgate standards for underground storage tanks covering detection, prevention, and correction of releases. These regulations are set forth in a proposed rule published elsewhere in today's Federal Register.

Section 9003(g) establishes a prohibition on the installation of certain underground storage tanks during the period from May 8, 1985 until the effective date of EPA's tank standards established under section 9003(a).

New section 9003(h), added to Subtitle I under section 205 of the Superfund Amendments and Reauthorization Act of 1986, establishes a program for cleanup of petroleum from leaking underground storage tanks.

Subtitle I also provides a procedure by which States may administer and enforce State UST programs in lieu of the Federal program established under section 9003. Under section 9004, States may submit their programs for approval by EPA. State UST programs will be approved by EPA if the State program includes requirements that are no less stringent than the Federal UST standards in seven areas, meets the requirements for notification found under section 9002, and provides for adequate enforcement of compliance with these program requirements.

Section 9004 specifies that a State program submitted to EPA for approval may cover petroleum substances, hazardous substances (not including hazardous wastes), or both. A State with an approved UST program has primary enforcement responsibility with respect to the requirements of its program. EPA retains authority to take enforcement action in approved States as necessary and will notify the designated lead State agency of any such intended action.

In a companion to this proposal, published elsewhere in today's Federal Register, EPA proposes the Federal program (as proposed elsewhere in today's Federal Register) for final approval. A detailed discussion of various approaches being examined by EPA for evaluating the stringency of State programs is provided in Section V.C.

Under section 9004(b) State programs may receive interim approval even if certain requirements are less stringent than the corresponding Federal standards. However, EPA is proposing that a State seeking interim approval must have each program element present in some form prior to interim approval. This proposal sets forth the procedures for final and interim approval and for approval expiration when a State with an interim program does not amend the program to meet Federal standards within statutorily-prescribed time periods.

Third, under section 9004(a) and (c), State UST programs must also provide for adequate enforcement of compliance with the standards established under the UST program. To meet this requirement, under today's proposal State implementing agencies must have the legal authority to enter and inspect any site or premise subject to regulation, immediately restrain violators or potential violators by order or by suit, sue in a court of competent jurisdiction, and assess or sue to recover certain civil penalties. In addition, State implementing agencies must also have authority to request tank owners or operators to furnish information related to their tanks and to conduct monitoring or testing.

In addition to the legal authorities, State UST programs must maintain a compliance program including periodic inspections and provide for public participation in enforcement proceedings.

Finally, section 9004(d) and (e) prescribe procedures EPA must follow in approving and withdrawing approval of State UST programs. Today's proposed rule establishes the procedures by which EPA will review applications submitted by States and approve or disapprove a program within 180 days as required by statute. In
B. Components of a Program

procedures and
A State may apply for approval after
and for State program approval under
program approval.
addition, today's proposal sets forth the conditions and procedures under which
EPA will revise or withdraw State UST program approval.

EPA plans to promulgate rules for technical tank standards under Part 280
and for State program approval under Part 281 at the same time in early 1988.
A State may apply for approval after
EPA promulgates all of the Part 280 Federal UST standards. Guidance
issued with the final State UST program approval rulemaking will supplement
the regulation with additional information on State application
procedures and EPA review and
evaluation of such applications.

B. Components of a Program Application

Section 281.20 of today's proposed regulation lists the parts of a State
program approval application that
States seeking approval must submit to
EPA. EPA will attempt to design a standardized State application form that
each State will submit. This form will contain the following parts: (1) a
transmittal letter from the Governor of the State, (2) a description of the current
State program, (3) a State program implementation plan including a
Memorandum of Agreement, (4) a
statement from the State Attorney General, and (5) copies of all applicable
State laws and regulations. Following is a
brief description of each of these components.

1. Transmittal letter signed by the Governor of the State that
accompanied the original State application. This letter
serves to transmit the State's formal request for UST program approval, and
indicates that the Governor has
approved the designated lead State agency for implementation of the UST program.

2. The program description serves
several purposes. First, it will describe the scope of the UST program for which
approval is requested including whether the program covers only petroleum
stores, only chemical tanks, or both, and
the extent to which it covers any Indian lands.

Today's proposal does not preclude States from adopting a State program
that is broader in scope than the Federal program, for example, a State program
that regulates all heating oil tanks.
(Tanks used for storing heating oil for
conservative use on the premises where
stored are excluded from the Federal UST program under section 9001(1)(B).)
In such an approved State, the
addition to the State program that is not part of the Federally approved program.
However, in approved States with
requirements that are more stringent
than the corresponding Federal
requirements, for example, leak
detection, the more stringent
requirement is part of the approved program and enforceable as the Subtitle
I standard in the State.

Second, this program description will
describe the organizational
structure of the State implementing
agency(ies). This includes both State agencies and local and municipal
implementing agencies that may be
jointly administering the UST program
within a State. The program description
must clearly delineate the jurisdictional responsibilities, program operation
roles, and lines of communication and
authority of these implementing agencies.

In addition, the program description
should include the number of persons
currently involved in UST program
operations and their functions and those
expected to be employed in the near
future. State applications should also
explain any limitations on hiring or
utilization of staff.

Thirdly, the program description must
explain how the State will meet the
estimated costs of administering the
program. All States must have some
source of funding independent of
Federal grant monies. The limited
amount of Federal grant dollars
available will probably not be sufficient
to administer and enforce an adequate
State UST program. Rather, these grants
are seed money for States seeking to
initiate program development while
securing other sources of funding.

Finally, the description of current
program operations must also explain
compliance monitoring and enforcement
procedures used by State implementing
agencies. This description should clearly
indicate what enforcement and
compliance steps are taken and by
which State implementing agencies.

At this time, there are no detailed
approval criteria for the above areas of
the program description. For example,
the proposed regulations do not
prescribe specific levels of State
program funding or staffing or specific
compliance monitoring and enforcement
procedures. The program description, in
general, will be used by EPA as
background information to ensure that a
viable State program does exist.
However, EPA intends that in certain
cases this information would be a basis
for non-approval. For example, EPA
would not approve a State program that
does not contain a funding plan for
implementation.

EPA is considering identifying, either
in the final rule or in guidance, the
specific criteria for disapproval in these
areas. EPA solicits comment on the
specific criteria for approving or
rejecting a State program based on the
program description. One issue already
brought to EPA's attention is whether a
State program can provide adequate
enforcement and compliance when the
program utilizes tank inspectors from
local governments but has no
established procedures for coordination
and communication of these efforts with
a State lead agency. EPA specifically
solicits comments on how enforcement
and compliance monitoring procedures
in the program description should be
evaluated.

A third aspect of a State UST
application is the State program
implementation plan. EPA intends to
approve State UST programs where not
all program implementation steps have
been taken but the State can provide a
plan to achieve a fully implemented
program within a reasonable period of
time. The implementation plan describes
what steps need to be taken and over
what time period. This approach allows
EPA to approve State programs at
different stages of implementation,
including new programs that will
continue to improve and evolve during
the next few years. This does not mean,
however, that EPA will approve State
programs that contain new tank
standards, corrective action, or financial
responsibility requirements that are less
stringent than corresponding Federal
requirements.

While initial program approval
requires that State authorities for
corrective action, financial
responsibility, notification, and new
tank standards be no less stringent than
Federal requirements, section 9004(b)
allows a one to three year interim
period after promulgation of Federal
regulations under Part 280 to adopt
requirements no less stringent than
corresponding Federal requirements for
leak detection, recordkeeping, reporting,
and closure. States receiving interim
approval under section 9004(b) must
include a schedule for the needed
legislative and/or regulatory action in
the State program implementation plan.

In addition, this plan will contain a
Memorandum of Agreement (MOA)
between EPA and the State. The State
will develop the draft MOA in
coordination with EPA. The MOA
delineates respective EPA and State
responsibilities for UST program
administration and enforcement and
will be particularly important where a
State is applying for a partial UST
program.

In the future, EPA and the State may
mutually agree to update and revise the
State implementation plan to reflect
State program growth and change. State implementation plans will be consistent with annual grant agreements and EPA/State agreements.

Criteria for disapproval of a State UST program based on an inadequate State implementation plan will be further defined in guidance which EPA intends to develop between proposal and promulgation of this rule. EPA is considering specifically identifying, either in the final rule or in guidance, program implementation requirements that must be in place, rather than merely planned, at the time of approval. EPA requests comments on which requirements should be in place at the time of approval and the criteria for approving or rejecting programs based on this portion of a State application.

(4) A fourth component of the State UST program application is the statement from the State Attorney General certifying that State laws and regulations provide adequate authority to carry out and enforce the required elements of an approved program. The Attorney General's statement provides the foundation for ensuring that the State UST program is no less stringent than the Federal program it will replace. This statement must include statutory and regulatory checklists provided by EPA and on the Disposition of State authority in the areas of compliance monitoring and enforcement; the program elements of leak detection and prevention, recordkeeping, reporting, closure, financial responsibility, corrective action, new tank performance standards, and notification; and the scope of the program described in the State application.

(5) Finally, a State program application must include copies of all applicable State laws and regulations. This information will assist EPA in evaluating the rest of the application, and will serve as the basis for establishing a record of what State laws and regulations are in effect in approved States. EPA will codify State program applications and incorporate State laws and regulations by reference as part of its final approval of the State program. This will enable all interested parties to receive notice of the laws and regulations comprising the Subtitle I program in approved States.

IV Considerations Affecting Today's Rule

A. State Involvement in Development of this Proposal

EPA's goal in establishing State program approval regulations under Section 904 is to develop clear and streamlined approval procedures consistent with the statutory approval requirements. In order to take advantage of past experiences and States' familiarity with existing processes, EPA decided to build upon existing State program approval procedures developed under other EPA programs. EPA also consulted with numerous State representatives in an effort to improve on the Agency's past State program approval procedures in this proposal. This proposal incorporates many of their suggestions.

Several States commented on the importance of establishing flexible criteria for approval of State programs, while at the same time identifying specific State program requirements as early as possible. EPA recognizes that these two objectives may often be in tension but has attempted in this proposal to balance these objectives through the establishment of clear baseline criteria that will accommodate, to the greatest extent possible consistent with the statute, existing State UST programs. Almost half the States have some form of UST program.

Specifically, EPA has attempted to respond to these State concerns by clearly stating program application requirements in the regulation. In addition, EPA is considering an option for determining approval under which States could demonstrate that their requirements are no less stringent than the Federal standards by meeting certain program objectives rather than by comparing each State requirement to the corresponding Federal requirement. States also commented that demonstration of program capabilities prior to approval would require States to operate their programs for at least a year, prior to seeking approval from EPA. In response to this, EPA is proposing that States seeking Federal approval of new programs with no "track record" of performance can submit an implementation plan, including a description of how all required program elements will be carried out in the future.

These issues are discussed further in other sections of this preamble.

B. Regulatory Approach to State Program Approval

In this proposal EPA has developed a State UST program approval regulation that establishes basic requirements for approval of State UST programs and outlines EPA review procedures. EPA has chosen to incorporate basic State program requirements and review procedures in a regulation, rather than guidance, because a regulation ensures consistent application of program approval requirements and provides more opportunity for public participation in the development of the requirements. More detailed information on EPA evaluation procedures will be made available to the States in guidance documents issued by the EPA Office of Underground Storage Tanks (OUST) at the time of promulgation of the final UST State program approval rule. Such guidance for States will explain how to prepare a State application, including a Memorandum of Agreement and a State implementation plan.

This EPA guidance will include additional detail on procedures for initial approval, amending applications during the period of interim approval, revising approved programs, and withdrawal of State program approval.

V Discussion of Significant Issues in Today's Rule

A. Adequate Enforcement of Compliance

In this proposal, EPA's review of State programs to ensure adequate enforcement of compliance will include specific legal authorities that must be available to the State enforcement agency, as well as State or local compliance programs, including periodic inspections. Under RCRA section 7002, EPA must also ensure opportunity for public participation in State enforcement following is a discussion of the issues raised by these requirements.

The first issue concerns requirements for inspection, monitoring, and compliance programs. The program description must outline the State's enforcement procedures in areas such as receipt and investigation of compliance information, but because of lack of information on specified procedures and a desire to maintain flexibility in approving a variety of State programs, EPA has not specified in today's proposal the particular procedures necessary for program approval. However, EPA cannot approve programs where procedures for compliance monitoring and enforcement are clearly inadequate. EPA requests comment on what enforcement and monitoring procedures the Agency should require for determining whether a State has demonstrated adequate enforcement of compliance, and the criteria by which EPA should evaluate such provisions. For example, should criteria be in the form of specific requirements or broad objectives? Are performance standards feasible? Should criteria be in regulation or guidance?

One specific compliance monitoring and enforcement requirement EPA...
considered but did not include in today's proposal was the maintenance of an updated notification data base. Beginning May 8, 1986 owners of underground storage tanks are required under Section 9002 to notify their designated State agency, but there is no statutory requirement for updating this notification information after it is submitted. Many States with existing programs have incorporated similar reporting requirements in their programs. EPA considered making updates for notification a requirement for demonstrating adequate enforcement under Section 9001, but has tentatively decided not to include such a requirement for the following reasons. First, the notification update is not required as part of the Federal notification requirements. In addition, reporting requirements for corrective action and closure in approved State programs may duplicate the updated notification information to some extent. Although EPA has chosen not to incorporate a notification update requirement in today's proposal, the Agency solicits comment on whether such a requirement is an essential component of State UST enforcement capabilities.

A second issue is public participation. Today's proposal provides that State enforcement proceedings must ensure adequate opportunity for public participation, through State law providing citizen's rights to intervene or through procedures requiring State implementing agencies to respond to inquiries from the public. A third option for meeting this public participation requirement is also provided in the proposed regulation. Under this third hybrid option, States could meet this requirement if they have the authority to allow intervention as of right in a manner analogous to Rule 24(a)(2) of the Federal Rules of Civil Procedure and provide assurance that the State enforcement agency(ies) will not oppose intervention under the State analogue to Rule 24 on the ground that the applicant's interest is inadequately represented by the State. Rule 24 allows intervention if the applicant can demonstrate to the satisfaction of the court that he or she "claims an interest relating to the property or transaction which is the subject of the action and is so situated that the disposition of the action may as a practical matter impair or impede his or her ability to protect that interest, unless the applicant's interest is adequately represented by existing parties." EPA solicits comment on whether these options provide sufficient flexibility to States and adequate opportunity for public participation in enforcement.

A third issue concerns legal authorities. Under the proposed regulation, a State must provide authority for assessing civil penalties of at least $10,000 per day, immediate injunctive authority, and authority for entry, inspection and information gathering. Although EPA recognizes that State authority to issue orders and assess penalties administratively might speed enforcement proceedings, in this proposal EPA has chosen not to require administrative order or administrative penalty assessment authority as a condition for approval. However, the State must describe its means of assessing penalties and enforcing the requirements of the program in the program description and in the State program implementation plan. EPA solicits comments on whether these administrative enforcement authorities should be program requirements, particularly in light of EPA plans to reconsider the need for these authorities in States approved under Subtitle C of RCRA. EPA also solicits comment on whether States have adequate alternative means of ensuring compliance with State and local UST requirements.

B. Approval Procedures

Following is a more detailed discussion of the procedures for approval and revision of State programs. States may submit an application for approval on the date of promulgation of the Federal technical requirements. EPA Regional offices will review State applications to determine if the application is complete. Required program approval components are: a transmittal letter signed by the Governor; a description of current State program operations and procedures; a plan for future implementation of State program requirements including a Memorandum of Agreement; an Attorney General's statement; and copies of applicable State laws and regulations.

After EPA determines that the State application is complete, EPA will make a final determination of approval or disapproval within 180 days. In the first stage of application review, the EPA Regional Administrator will make a tentative recommendation on approval or disapproval. EPA will then publish a tentative determination in the Federal Register and allow 30 days for public notice and comment. EPA will hold a public hearing if there is sufficient public interest shown during the comment period.

Next, the EPA Regional Administrator will evaluate the public comments and make a final decision on approval or disapproval within the statutorily-mandated 180 days. EPA will publish this decision in the Federal Register.

Though States may apply to operate all aspects of the UST program for both petroleum and hazardous substance tanks, approval of State UST programs may occur in phases. Section 9004 authorizes approval of State programs for interim periods and approval of certain types of partial programs.

Initially, State programs may be approved for a period of one to three years from the date of promulgation of Federal tank standards under Part 280 of today's proposal, even if their leak detection, recordkeeping, reporting, and closure requirements are less stringent than Federal standards. However, EPA believes that some requirements in each of these areas must be present at the time of interim approval and EPA solicits comment on what degree of program development should already be in place. For example, would locally adopted ordinances be sufficient? States that choose to apply for interim approval must submit to EPA an amended application to their approved program by the end of the applicable time period. This amended application must show that the State's leak detection and prevention, recordkeeping, reporting, and closure requirements are no less stringent than corresponding Federal standards. EPA will review this amended application in the same manner as the original application. EPA will publish the tentative determination made by the EPA Regional Administrator in the Federal Register, and will make a final determination within 180 days. If a State fails to submit an amended application, or EPA disapproves its amended application, the approved status of the State's entire program will expire automatically. This issue is discussed further in this preamble under "Automatic Expiration of Interim Approval."

At some point in the future it may be necessary for States to submit revisions to approved programs for approval by EPA. This may occur, for example, when Federal or State authorities are changed by new legislation or rulemaking. EPA will treat revised applications similar to amended applications in that only those program areas affected by the change will be subject to review and revision by EPA. However, EPA review of revised applications will be streamlined. Instead of publishing a tentative determination in the Federal Register, EPA will publish
a proposed determination that becomes final immediately after 60 days if no unresolved adverse public comments are received. This immediate final rulemaking procedure has also been used in State program approval under Subtitle C of RCRA, and for approval of revisions to State Implementation Plans under the Clean Air Act. If EPA receives substantial adverse public comments that are unresolved, the Agency will then publish a notice withdrawing the immediate final decision and follow the procedures used for initial and amended applications. In addition, if EPA has reason to believe that a particular revision will receive significant adverse comment, EPA may choose to follow the usual review procedures for program applications, rather than begin with the immediate final rulemaking process.

Table I lists State program elements that must be no less stringent than corresponding Federal standards at the time of application and the various types of State program approval.

### Table I

<table>
<thead>
<tr>
<th>Partial-petroleum tanks</th>
<th>Partial-hazardous substance tanks</th>
<th>Complete-petroleum and hazardous substance tanks</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPES OF APPROVAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. A. Application for Internm Approval ¹</td>
<td>Corrective action</td>
<td>Corrective action</td>
</tr>
<tr>
<td>Corrective action</td>
<td>Financial responsibility</td>
<td>Financial responsibility</td>
</tr>
<tr>
<td>Financial responsibility</td>
<td>New tank standards</td>
<td>New tank standards</td>
</tr>
<tr>
<td>New tank standards</td>
<td>Notification</td>
<td>Notification</td>
</tr>
<tr>
<td>Notification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.B. Amended Application by End of Internm Period</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leak detection and prevention</td>
<td>Leak detection and prevention</td>
<td></td>
</tr>
<tr>
<td>Reporting</td>
<td>Recordkeeping</td>
<td>Reportiing</td>
</tr>
<tr>
<td>Recordkeeping</td>
<td>Reporting</td>
<td>Reporting</td>
</tr>
<tr>
<td>Closure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Application for Final Approval</td>
<td>Corrective action</td>
<td>Corrective action</td>
</tr>
<tr>
<td>Corrective action</td>
<td>Financial responsibility</td>
<td>Financial responsibility</td>
</tr>
<tr>
<td>Financial responsibility</td>
<td>New tank standards</td>
<td>New tank standards</td>
</tr>
<tr>
<td>New tank standards</td>
<td>Notification</td>
<td>Notification</td>
</tr>
<tr>
<td>Notification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Subsequent Revision to Approved Programs</td>
<td>Program components affected by revision</td>
<td>Program components affected by revision</td>
</tr>
<tr>
<td>Program components affected by revision</td>
<td>Program components affected by revision</td>
<td></td>
</tr>
</tbody>
</table>

¹ The period of interim approval extends one to three years from promulgation of the Federal tank standards under Part 280 proposed elsewhere in today's Federal Register. If State regulatory action alone is needed to make leak detection and prevention, recordkeeping, reporting, and closure requirements no less stringent than Federal standards, EPA may approve the program for one year. If State legislative action is needed, EPA may approve the State program for a two year period. If both State legislative and regulatory action is needed, EPA may approve the State program for a three year period. Note that these time periods begin on the date of promulgation of Federal regulations under Part 280. One to three years from the date of promulgation of these regulations, all interim approval will expire unless an amended State application covering the new or modified program requirements is submitted to EPA. Note also that all approved State programs must provide for adequate enforcement of compliance of the above program requirements and standards.

C. Determination of "No Less Stringent"

A critical area of the State program approval process is the determination that State programs are "no less stringent" than Federal requirements. EPA's approach to this issue is based on an intent to develop a flexible State program approval process that will allow States to explore innovative approaches in program development and implementation, while providing the required level of stringency. The Agency believes that a flexible approach will encourage States to seek Federal approval to administer and enforce UST programs in lieu of the Federal program. State or local program administration and enforcement is an important component of a national UST program, as most environmental problems associated with leaking tanks are localized in nature, and the most effective response may be provided through a State or local program.

Federal law requires States seeking UST program approval to demonstrate that eight specific technical program elements are "no less stringent" than corresponding Federal requirements. These eight program elements are: leak detection; recordkeeping; reporting of releases and corrective action taken by owners and operators; corrective action; closure; financial responsibility; notification; and standards of performance for new underground tanks. EPA is considering several approaches to determining whether program requirements in States seeking approval are "no less stringent" than the Federal standards, and solicits comment on the following options and any variations or combinations of them:

A. One option EPA is examining is a holistic approach to evaluating the stringency of State UST program requirements. In this approach, the stringency of the total State program is compared to the overall stringency of the Federal requirements for leak detection, recordkeeping, reporting, corrective action, closure, financial responsibility, new tank performance standards, and notification. Individual State program elements, e.g., corrective action or financial responsibility, would be allowed to be less stringent than corresponding Federal requirements provided the total State program was determined to be no less stringent than

---

If EPA

---

Proposed Rules
the overall Federal program. For example, less stringent leak detection standards could be balanced with more stringent tank standards.

This approach has several advantages. First, it ensures that each State program meets the same level of overall environmental and health protection as the Federal program. In addition, this option would give maximum flexibility to the States in crafting individual requirements which meet an overall Federal standard of environmental protection while also addressing State-specific concerns and environmental conditions.

However, this option also has several major disadvantages. EPA believes that statutory language of Section 9004 indicates Congressional intent that State requirements in each area be no less stringent than the corresponding requirements and standards promulgated by EPA. This interpretation would not allow EPA to evaluate a State program in terms of its overall stringency as proposed in this option. Another problem with such "trade-offs" between program elements is the potential for 56 State variations on the same overall requirements. Individual requirements for leak detection or new tank standards could vary from State to State provided the overall State programs were determined to be no less stringent than the total Federal requirements. This broad variability of State programs would not provide a clear baseline for State program requirements or consistent requirements for tank owners and operators nationwide. In addition, it is likely that the evaluation of State programs and the program approval process would be more difficult and more time consuming since EPA would need to complete an analysis of each State submittal to determine the overall stringency of each State program.

B. A second option under consideration by EPA would require the Agency to evaluate the stringency of each individual requirement within a program element. Under this approach, EPA would not approve a State program that has any requirement less stringent than the corresponding Federal requirement even if other State requirements ensure that the less stringent requirement does not make the State program overall less protective than the Federal program. For example, if the Federal new tank performance standard includes ten separate requirements, approved State programs would have to contain all ten of the requirements, each one determined by EPA to be no less stringent than the Federal requirement.

The advantage of this approach is that program approval criteria are clear and the administrative burden of seeking approval is easier for both EPA and the State. However, the serious disadvantage of this approach is that it allows less flexibility for States to formulate approvable programs that are also tailored to individual State needs. States with existing programs could be required to make substantial revisions to their programs in order to receive approval, and States without existing programs may be discouraged from developing innovative approaches to regulating underground storage tanks.

C. A third option is a compromise between the first two options, being less flexible than Option A but more flexible than Option B. Under the third option each program element (e.g., leak detection), would need to be no less stringent than the corresponding Federal standard, rather than each requirement within that element. EPA would evaluate each program element holistically allowing for the use of trade-offs within elements but no trade-offs would be allowed among elements, such as balancing less stringent leak detection standards with more stringent tank standards. EPA would consider the use of trade-offs within a program element by allowing States to demonstrate that, for example, overall leak detection objectives established by EPA could be met under the State program even though not all State leak detection requirements are as stringent as Federal requirements. For example, under the leak detection element, sampling frequency might be less frequent in conjunction with a more stringent State requirement for location of monitoring wells.

The advantage of this approach is that it provides EPA with a substantial amount of flexibility in approving a variety of existing and new State programs while ensuring that a baseline of protection is met. The disadvantage of this option, as for Option A, is that EPA would be required to develop objectives for each of the required program elements and guidance for States on how these objectives would be compared to ensure that the State element was no less stringent than the corresponding Federal standard.

Currently EPA favors Option C because it allows more flexibility than Option B and does not pose the problems noted above for Option A. The Agency will be continuing work to determine how these approaches, or combination of these approaches, could be implemented. EPA solicits comments on which of these approaches is feasible, and how they could be implemented effectively through guidance or incorporation in the final rule.

D. Automatic Expiration of Interim Approval

As noted elsewhere in this preamble, under Subtitle I State programs may receive interim approval for a period of one to three years from the date of promulgation of Federal tank standards under Part 280, proposed elsewhere in today's Federal Register, even if their existing leak detection and prevention, recordkeeping, reporting, and closure requirements are less stringent than the Federal standards. In order for an interim approved State program to maintain its approved status, a State must submit an amended application covering changes to the less stringent program components listed above by the end of the appropriate interim period, or its approval will expire automatically.

After a State submits an amended approval application, EPA will generally require 180 days to determine if approval will be granted. If an amended application is submitted to EPA, and is disapproved, approval of the entire program will expire at the time the amended program is disapproved. If a State does not submit an amended application by the end of the interim approval period, approval of the program will expire at that time. The expiration of interim approval under Subtitle I does not require EPA to terminate or withdraw the program since the approval terminates automatically under the statute. States with expired interim approval may, through a Cooperative Agreement with EPA, continue to implement parts of the Federal UST program until such States apply for and receive final approval.

EPA interprets the interim period to refer to the period of time the State has to submit an amended application, not that the State must receive final approval by the end of the grace period. Accordingly, interim approval expires at the end of the applicable interim period if no amended application is submitted, or if an amended application is submitted, when EPA makes a determination to disapprove the amended application.

States that seek interim and then final approval are required to submit two separate approval applications for interim and final approval and undergo the 180 day EPA review twice. States that receive interim approval must be
prepared to meet final approval requirements by the end of the grace period or automatic expiration of approval will occur.

E. Withdrawal of Approval of State Programs

Withdrawal procedures are outlined in § 281.51 of today's proposal. EPA has designed separate withdrawal procedures for circumstances when an approved State voluntarily transfers program responsibilities back to EPA versus when EPA initiates proceedings to determine if approval of a State program should be withdrawn. If EPA initiates withdrawal, the proceedings are to be conducted in accordance with adjudicatory hearing proceedings as outlined in 40 CFR parts 220 and 225 (b) and (c) of the Subtitle C State program approval regulation. EPA considered, but rejected, an alternative approach calling for withdrawal procedures by regulation rather than an adjudicatory hearing process. An example of this alternative approach is found in 40 CFR 145.34, under the Underground Injection Control (UIC) program.

Because Subtitle I of RCRA, covering the regulation of underground storage tanks, lacks the statutory direction provided to the UIC program under the Safe Drinking Water Act, and because a precedent for adjudicatory hearings in withdrawal proceedings has been established for RCRA under Subtitle C, EPA has chosen to incorporate the adjudicatory hearing procedures. EPA solicits comment on this issue and on other optional approaches such as withdrawal by regulation in conjunction with an appeals process that incorporates an adjudicatory hearing.

VI. Relationship to Other EPA Programs

A. RCRA Hazardous Waste UST Program

State UST program requirements and approval procedures will be treated independently of State authorization under other related EPA programs. Federal UST legislation, under Subtitle I of RCRA, was developed to address an environmental problem not adequately covered by existing EPA programs. Existing underground tank regulations promulgated under Subtitle C (40 CFR Part 284, July 14, 1986), are applicable only to hazardous wastes, which are not "regulated substances" under Subtitle I (except for petroleum wastes). Therefore, approval of a State UST program under Subtitle I of RCRA does not entitle a State to implement UST requirements under Subtitle C of RCRA. See "Relationships to Other EPA Programs" discussed under the proposal of Federal UST standards, published elsewhere in today's Federal Register for additional information.

B. Leaking Underground Storage Tank Petroleum Response Fund

Under the Superfund Amendments and Reauthorization Act of 1986, Subtitle I was amended to provide a trust fund for corrective action by EPA, and States under Cooperative Agreement, in response to leaking underground petroleum storage tanks. After promulgation of Federal regulations under Part 280, EPA intends to link use of the trust fund by States to progress in developing approvable State UST programs. EPA will establish the exact nature and extent of this relationship through the next six to twelve months as EPA develops the administrative framework and initial Cooperative Agreements under the trust fund.

VII. Economic and Regulatory Impacts

A. Regulatory Impact Analysis

Under Executive Order 12291, EPA must determine whether a new regulation is a "major" rule and prepare a Regulatory Impact Analysis in connection with a major rule. A "major" rule is defined as one that is likely to result in: (1) an annual effect on the economy of $100 million or more; (2) a major increase in costs or prices for consumers, individual industries, Federal, State, and local government agencies or geographic regions; or (3) significant adverse effects on competition, employment, investment, productivity, innovation, or on the ability of U.S.-based enterprises in domestic or export markets.

This proposal will have none of the above effects, because requirements for State UST programs as outlined in this proposal will not add substantial costs beyond those imposed under the Federal UST regulations approved elsewhere in today's Federal Register. Because the proposed rulemaking does not meet the definition of a major regulation, the Agency is not conducting a Regulatory Impact Analysis at this time. However, a Regulatory Impact Analysis has been prepared for the proposed Federal tank standards and is described in the preamble to that regulation, published elsewhere in today's Federal Register. Today's proposal was submitted to the Office of Management and Budget (OMB) for review as required by Executive Order 12291.

B. Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601 et seq.) requires an agency to prepare and make available for public comment, a regulatory flexibility analysis that describes the impact of a proposed or final rule on small entities (i.e., small businesses, small organizations, and small governmental jurisdictions). No regulatory flexibility analysis is required if the head of an agency certifies the rule will not have significant economic impact on a substantial number of small entities.

This proposal, in itself, will not have a significant impact on a substantial number of small entities, since Federal UST requirements will already be in effect in all States seeking program approval subsequent to promulgation of Federal UST requirements under Subtitle I. However, EPA has determined that the proposed rule for tank standards under Subtitle I, published elsewhere in today's Federal Register, will have a significant economic impact on a substantial number of small entities based on the analysis prepared for that proposed rule. (See the preamble to that proposal for a discussion of these impacts.)

C. Paperwork Reduction Act

The information collection requirements in this proposed rule have been submitted for approval to OMB under the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 et seq. Submit comments on these requirements to the Office of Information and Regulatory Affairs; OMB: 7200 Jackson Place, NW., Washington, DC 20503; marked "Attention: Desk Officer for EPA." The final rule will respond to any OMB or public comments on the information collection requirements.

List of Subjects In 40 CFR Part 281

Administrative practice and procedure, Hazardous materials, Petroleum, State program approval, Underground storage tanks.


Lee M. Thomas, Administrator.

For reasons set out in the preamble, Title 40 of the Code of Federal Regulations is proposed to be amended by adding new Part 281 as follows:

PART 281—APPROVAL OF STATE UNDERGROUND STORAGE TANK PROGRAMS

Subpart A—Purpose, General Requirements and Scope

Sec. 281.10 Purpose.
281.11 General requirements.
281.12 Scope and definitions.
Subpart B—Components of a Program Application.
281.20 Program application.
281.21 Description of current State program.
281.22 State program implementation plan.
281.23 Attorney General's statement.

Subpart C—Adequate Enforcement of Compliance
281.30 Requirements for compliance program and authority.
281.31 Requirements for enforcement authority.
281.32 Requirements for public participation.
281.33 Sharing of information.

Subpart D—Approval Procedures
281.40 Approval procedures for State programs.
281.41 Amendment required at end of interim period.
281.42 Revision of approved State programs.

Subpart E—Withdrawal of Approval of State Programs
281.50 Criteria for withdrawal of approval of State programs.
281.51 Procedures for withdrawal of approval of State programs.

Authority: Sec. 2002, 9004, 9005, 9006 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6912, 6916(c), (d), (e)).

Subpart A—Purpose, General Requirements and Scope
§ 281.10 Purpose.
(a) This subpart specifies the requirements that State programs must meet to be approved by the Administrator under Section 9004 of RCRA, and the procedures EPA will follow in approving, revising and withdrawing approval of State programs.
(b) State submissions for program approval must be in accordance with the procedures set out in this part.
(c) A State may apply for approval under this subpart at any time after the promulgation of release detection, prevention, and correction regulations under section 9003 of RCRA.
(d) Any State program approved by the Administrator under this Part shall at all times be conducted in accordance with the requirements of this part.

§ 281.11 General requirements.
(a) The following substantive elements of a State program must be addressed in a State application for approval:
(1) Requirements for all existing and new underground storage tanks:
(i) Leak detection and prevention;
(ii) Recordkeeping for leak detection;
(iii) Reporting of releases and corrective action;
(iv) Corrective action; and
(v) Tank closure; and
(vi) Financial responsibility for corrective action and compensating injured third parties.
(2) Standards of performance for new tanks.
(3) Requirements for notification of the existence of tanks.
(4) Provisions for adequate enforcement of compliance with the above program elements.
(b) Except as provided in paragraph (c) of this section, the State must demonstrate that its requirements and standards for existing and new tanks are no less stringent than the Federal requirements and standards in 40 CFR Part 280, and that it has a program which provides adequate enforcement of compliance with these requirements.
(c) (1) The Administrator may approve State programs with requirements less stringent than the Federal requirements for a period of one to three years from the date of promulgation of regulations under Part 280. Such interim approval may be granted only if State regulatory and/or legislative change is required in order for the State program to be no less stringent than the Federal requirements and standards under Part 280 for one or more of the following program elements: leak detection and prevention; recordkeeping for leak detection; reporting of releases and corrective action; and closure.
(2) A State program may receive interim approval if it—
(i) Has requirements for:
(A) Leak detection and prevention;
(B) Recordkeeping for leak detection;
(C) Reporting of releases and corrective action; and
(D) Closure; and
(ii) Has requirements that are no less stringent than the corresponding Federal requirements for:
(A) Corrective action;
(B) Financial responsibility;
(C) Notification; and
(D) New tank standards; and
(iii) Provides for adequate enforcement of compliance with these requirements.
(3) A State with a program which has received interim approval must receive final approval of an amended program containing program elements which are no less stringent than the Federal requirements in accordance with the following schedule:
(i) If only State regulatory action is required, the State must submit an amended program to EPA for approval one year after issuance of the regulations under 40 CFR Part 280.
(ii) If only State legislative action is required, the State must submit an amended program to EPA for approval two years after the issuance of the regulations under 40 CFR Part 280.
(iii) If both State legislative and regulatory action are required, the State must submit an amended program to EPA for approval three years after issuance of the regulations under 40 CFR Part 280.
(d) States with programs approved under this Part are authorized to administer the State program in lieu of the Federal program and will have primary enforcement responsibility with respect to the requirements of the approved program. EPA retains authority to take enforcement action in approved States as necessary and will notify the designated lead State agency of any such intended action.

§ 281.12 Scope and definitions.
(a) Scope. (1) The Administrator may approve either partial or complete State programs. A "partial" State program regulates either solely petroleum tanks or solely hazardous substance tanks. If a "partial" State program is approved, EPA will administer the remaining part of the program. A "complete" State program regulates both petroleum and hazardous substance tanks.
(2) EPA will administer the UST program on Indian lands, except where Congress has clearly expressed an intention to grant a State authority to regulate petroleum and hazardous substance USTs on Indian lands. This will not impair a State's ability to obtain program approval for petroleum and/or hazardous substances on non-Indian lands in accordance with this part.
(b) Definitions. (1) The definitions in Part 280 apply to all subparts of this part.
Subpart B—Components of a Program Application

§ 281.20 Program application.

Any State that seeks to administer a program under this Part shall submit an application as designed by EPA that shall contain the following parts:

(a) A transmittal letter from the Governor of the State requesting program approval;

(b) A description in accordance with § 281.21 of the current State program and operating procedures;

(c) A State program implementation plan in accordance with § 281.22, covering future plans for State program implementation, and a Memorandum of Agreement;

(d) An Attorney General's statement in accordance with § 281.23; and

(e) Copies of all applicable State statutes and regulations.

§ 281.21 Description of current State program.

A State seeking to administer a program under this part must submit a description of the program it proposes to administer under State law in lieu of the Federal program. The description of a State's existing or planned program shall include:

(a) The scope of the State program:

(1) Whether the State program regulates petroleum or hazardous substances, or both;

(2) Whether the State has any existing authority over Indian lands or has existing agreements with Indian tribes relevant to the regulation of underground storage tanks;

(b) The organization, structure, and jurisdiction of the State and local agencies with responsibility for administering the program. The jurisdiction and responsibilities of all State and local implementing agencies must be delineated, appropriate procedures for coordination set forth, and one State agency designated as a “lead agency” to facilitate communications between EPA and the State.

(c) Staff resources to carry out and enforce the required State program elements, both existing and planned, including the number of employees, agency where employees are located, general duties of these employees, and current limits or restrictions on hiring or utilization of staff.

(d) An existing State funding mechanism to meet the estimated costs of administering and enforcing the required State program elements, and any restrictions or limitations upon this funding.

(e) A description of applicable State procedures, including a complete description of the compliance monitoring and enforcement program and State administrative or judicial review procedures.

§ 281.22 State program implementation plan.

A State must submit a plan outlining how the State will administer and enforce the program elements required under this Part, including steps to be taken to improve program administration and enforcement. This plan shall include:

(a) A discussion of how the program described under Section 281.21 will be implemented to meet requirements of this part;

(b) If a State currently has authority over underground storage tank activities on Indian lands, the statement shall contain an appropriate analysis of the State's authority.

Subpart C—Adequate Enforcement of Compliance

§ 281.23 Attorney General’s statement.

A State must submit a statement including statutory and regulatory requirements for leak detection and prevention, recordkeeping, reporting, or closure in order to be no less stringent than the Federal requirements, the plan must include a schedule for making such changes and for submitting an amendment to the State application in accordance with § 281.41:

(a) Any authorized employee of the State engaged in compliance inspections, monitoring, and testing shall have authority to obtain any information from an owner or operator with respect to his/her tanks, tank contents and associated equipment. Any authorized employee of the State shall also have authority to request an owner or operator to conduct monitoring or testing.

(b) Authorized employees shall have the authority to enter any site or premises subject to underground storage tank regulations or in which records relevant to the underground storage tank program operation are kept in order to copy any records, obtain samples of regulated substances, inspect and conduct monitoring or testing of tanks, associated equipment and the surrounding environment.

(c) State programs shall have procedures for receipt, evaluation, retention, and investigation of all records and reports required of owners or operators and shall provide for investigation for possible enforcement of failure to submit these records and reports.

(d) State programs shall have inspection and surveillance procedures to determine, independent of information supplied by regulated persons, compliance with program requirements. States shall maintain a program for periodic inspections of facilities subject to regulation in a manner designed to determine compliance or non-compliance, to verify accuracy of information submitted by owners or operators of regulated underground storage tanks and to verify specific statutes, administrative regulations, and where appropriate, judicial decisions which demonstrate adequate authority to regulate and enforce requirements for underground storage tanks. State statutes and regulations cited by the State Attorney General shall be fully effective by the time the program is approved.
adequacy of methods used by owners or operators in developing that information.

(e) Investigatory inspections shall be conducted, samples shall be taken, and other information shall be gathered in a manner (e.g., using proper "chain of custody" procedures) that will produce evidence admissible in an enforcement proceeding or in court.

(f) State programs shall maintain a program for investigating information obtained regarding violations of applicable program requirements, including proper consideration of information submitted by the public about violations. Public effort in reporting violations shall be encouraged and the State enforcement agency(ies) shall make available information on reporting procedures.

(g) State programs shall maintain a program which is capable of making comprehensive surveys of all facilities and activities subject to the State agency(ies) authority to identify persons subject to regulation who have failed to comply with program requirements. Any compilation, index, or inventory of such facilities and activities shall be made available to EPA upon request.

§ 281.31 Requirements for enforcement authority.

(a) Any State agency administering a program shall have the authority to implement the following remedies for violations of State program requirements:

(1) To restrain immediately and effectively any person by order or by suit in State court from engaging in any unauthorized activity which is endangering or causing damage to public health or the environment;

(2) To bring an action in courts of competent jurisdiction to enjoin any threatened or continuing violation of any program requirement;

(3) To assess or sue to recover in court civil penalties as follows:

(i) Civil penalties for failure to notify or for submitting false information pursuant to tank notification requirements shall be assessable up to at least $10,000 per tank.

(ii) Civil penalties for failure to comply with any State requirements or standards for existing or new tanks shall be assessable for each instance of violation up to at least $10,000 for each tank for each day of violation. If the violation is continuous, civil penalties shall be assessable up to at least $10,000 for each day of violation.

(b) The burden of proof and degree of knowledge or intent required under State law for establishing violations under paragraph (a)(3) of this section, shall be no greater than the burden of proof or degree of knowledge or intent that EPA must provide when it brings an action under Subtitle I of the Resource Conservation and Recovery Act.

(c) A civil penalty assessed, sought, or agreed upon by the State enforcement agency(ies) under paragraph (a)(3) of this section shall be appropriate to the violation.

§ 281.32 Requirements for public participation.

Any State administering a program shall provide for public participation in the State enforcement process by providing:

(a) Authority which allows intervention as of right in any civil action to obtain the remedies specified in § 281.31 by any citizen having an interest that is or may be adversely affected; or

(b) Assurance by the appropriate State agency that:

(1) It will publish notice of and provide at least 30 days for public comment on all proposed settlements of civil enforcement actions (except where immediate action is necessary to adequately protect human health and the environment);

(2) It will investigate and provide written notice to all citizen complaints about violations; and

(3) It will not oppose citizen intervention when permissive intervention is allowed by statute, rule, or regulation; or

(c) Authority which allows intervention in a manner analogous to Federal Rule 24(a)(2), and assurance by the appropriate State enforcement agency that it will not oppose intervention under the State analogue to Rule 24(a)(2) on the ground that the applicant's interest is adequately represented by the State.

§ 281.33 Sharing of information.

(a) States with approved programs shall furnish EPA, upon request, any information in their files obtained or used in the administration of the State program. Such information includes:

(1) Any information which is submitted to EPA without a claim of confidentiality; and

(2) Any information submitted to EPA under a claim of confidentiality, subject to the conditions in 40 CFR Part 2.

Subpart D—Approval Procedures

§ 281.40 Approval procedures for State programs.

(a) The following procedures are required for all applications, regardless of whether the application is for a partial or complete program, as defined in § 281.12, or for interim or final approval in accordance with § 281.11.

(b) Prior to submitting an application to EPA for approval of a State program, the State shall publish notice of and comment in the development of its underground storage tank program.

(c) Upon receipt by EPA of a State program application, EPA will examine the application and notify the State as to whether its application is complete, in accordance with the application components required in § 281.20. The 180 day statutory review period shall begin only after all necessary information is received by EPA.

(d) The State and EPA may by mutual agreement extend the review period.

(e) After receipt of a complete program application, the Administrator shall tentatively determine approval or disapproval of the State program. EPA will issue public notice of the tentative determination in the Federal Register; in enough of the largest newspapers in the State to attract statewide attention; and to persons on the State agency mailing list and any other persons whom the Administrator believes are interested. Such notice of the tentative determination shall also:

(1) Afford the public 30 days after the notice to comment on the State's submission and the tentative determination; and

(2) Include a general statement of the areas of concern if the Administrator indicates the State program may not be approved; and

(3) Note the availability for inspection by the public of the State program submission and

(4) Indicate that a public hearing will be held by EPA no earlier than 30 days after notice of the tentative determination unless sufficient public interest is not expressed, at which time the Regional Administrator may cancel the public hearing.

(f) Within 180 days of receipt of a complete State application, the Administrator shall make a final determination whether or not to approve...
§ 281.41 Amendment required at end of interim period.
(a) State programs that meet the requirements of § 281.11(c) (1) and (2) may be approved for one to three years from the date of promulgation of regulations under Part 280. States which receive such interim approval must adopt requirements which are no less stringent than the corresponding Federal requirements and standards within the timeframes specified under § 281.11(c)(3).
(b) At the end of the specified time period, a State with interim approval must submit to EPA an amendment to its application which includes all modified and new requirements for leak detection and prevention, recordkeeping, reporting, or closure, as specified in the State's program implementation plan. Such amended applications must also include a modified program description and State implementation plan, an Attorney General's statement and a Memorandum of Agreement that incorporate the amended program requirements, and copies of all applicable State statutes and regulations.
(c) Upon receipt of the application amendment, the Administrator shall follow the same review and approval procedures as required in § 281.40.
(d) If a State fails to submit an amendment within the specified timeframe for interim approval of the State program shall expire upon the applicable date established under § 281.11(c), and the Subtitle I program shall automatically revert to EPA.
(e) If a State submits an amendment to the program application within the timeframe specified under § 281.11(c)(9) and the amendment is disapproved, the interim approval of the State program shall expire immediately upon disapproval and the Subtitle I program shall automatically revert to EPA.
(f) If interim approval of the State program expires, EPA shall notify the regulated community and the public of the re-establishment of the Federal program through a notice in the Federal Register.

§ 281.42 Revision of approved State programs.
(a) Either EPA or the approved State may initiate program revision. Program revision may be necessary when the controlling Federal or State statutory or regulatory authority is changed or when responsibility for the State program is shifted to a new agency or agencies. The State shall inform EPA of any proposed modifications to its basic statutory or regulatory authority or change in division of responsibility among State agencies. EPA will determine in each case whether a revision of the approved program is required.
(b) Whenever the Administrator has reason to believe that circumstances have changed with respect to an approved State program or the Federal program, the Administrator may request, and the State shall provide, a revised application as prescribed by EPA.
(c) The Administrator shall approve or disapprove program revisions based on the requirements of this part and of Subtitle I pursuant to the procedures under this section, or under § 281.40 if EPA has reason to believe the proposed revision will receive significant adverse comment from the public.
(1) The Administrator shall issue public notice of planned approval or disapproval of a State program revision in the Federal Register; in enough of the largest newspapers in the State to attract statewide attention; and by mailing to persons on the EPA mailing list and to any other persons whom the agency has reason to believe are interested. The public notice shall summarize the State program revision, indicate whether EPA intends to approve or disapprove the revision and provide for an opportunity to comment for a period of 30 days.
(2) The Administrator's decision on the proposed revision shall become effective 60 days after the date of publication in the Federal Register in accordance with paragraph (c)(1) of this section, unless an adverse comment pertaining to the State revision discussed in the notice is received during the comment period. If an adverse comment is received, EPA shall so notify the State and shall, within 60 days after the date of publication, publish in the Federal Register either:
(i) A withdrawal of the immediate final decision. EPA's planned decision shall then be treated as a tentative decision in accordance with the applicable procedures of 281.40 (e) and (f); or
(ii) A notice containing a response to adverse comments and which either affirms that the immediate final decision takes effect or reverses the decision.
(d) Revised State programs that receive approval shall be codified in the Federal Register.

Subpart E—Withdrawal of Approval of State Programs
§ 281.50 Criteria for withdrawal of approval of State programs.
(a) The Administrator shall withdraw program approval when the Agency determines that a State no longer has adequate regulatory or statutory authority or is not administering and enforcing an approved program in accordance with this part. The State must have adequate capability to administer and enforce the State program. In evaluating whether such capability exists, the Agency will consider whether the State is taking timely and appropriate enforcement actions and will evaluate the quality and number of State compliance inspections.
(b) Such withdrawal of approval shall occur only after the State fails to take appropriate corrective action within a reasonable time, not to exceed 120 days after notice from the Administrator that the State is not administering and enforcing its program in accordance with the requirements of this part.

§ 281.51 Procedures for withdrawal of approval of State programs.
(a) The following procedures apply when a State with an approved program voluntarily transfers to EPA those program responsibilities required by Federal law.
(1) The State shall give EPA notice of the proposed transfer, and shall submit, at least 90 days prior to the transfer, a plan for the orderly transfer of all relevant program information necessary for EPA to administer the program.
(2) Within 30 days of receiving the State's transfer plan, EPA shall evaluate the plan and identify any additional information needed by the Federal government for program administration and/or identify any other deficiencies in the plan.
(3) At least 30 days before the transfer is to occur, EPA shall publish notice of the transfer in the Federal Register; in enough of the largest newspapers in the State to attract statewide attention; and to persons on appropriate State mailing lists.
(b) The following procedures apply when EPA begins proceedings to determine whether to withdraw approval of a State program, either on its own initiative or in response to a petition from an interested person:
(1) Withdrawal proceedings shall be conducted in accordance with procedures set out in 40 CFR 271.23 (b) and (c), except for § 271.23(b)(6)(iii) to the extent that it deviates from requirements under § 281.50.
Part III

Department of Health and Human Services
Environmental Protection Agency

Notice of the First Priority List of Hazardous Substances That Will Be the Subject of Toxicological Profiles and Guidelines for Development of Toxicological Profiles
DEPARTMENT OF HEALTH AND HUMAN SERVICES

Environmental Protection Agency

[OPTS-400003; FRL-3174-9(a)]

Notice of the First Priority List of Hazardous Substances That Will Be the Subject of Toxicological Profiles

AGENCY: Department of Health and Human Services (DHHS) and Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: The Superfund Amendments and Reauthorization Act (SARA) amends the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) by establishing certain requirements for EPA and the Agency for Toxic Substances and Disease Registry (ATSDR) of DHHS with regard to hazardous substances which are most commonly found at facilities on the CERCLA National Priorities List (NPL). Among these statutory requirements is a mandate for the two agencies to prepare a list of at least 100 hazardous substances, in order of priority, which are most commonly found at NPL facilities and which the agencies determine are posing the most significant potential threat to human health. Section 110 of SARA requires that the list be prepared no later than April 17, 1987. This notice contains that priority list of 100 substances, and provides a brief summary of the methodology used to assemble the list.

ADDRESS: Comments on this notice should be sent to the docket control number OPTS-400003, and should be submitted to the following address: Document Control Officer (TS-790), Office of Toxic Substances, Environmental Protection Agency, Room NE-C004, 401 M Street SW., Washington, DC 20460.

Comments which contain confidential business information (CBI) should clearly note that they contain CBI and should be sent in triplicate to the address given above. For further information regarding the submission of comments containing CBI, see Unit V of this notice. Non-confidential versions of comments on this notice will be available for public inspection in Room NE-C004 at the address given above from 8 a.m. to 4 p.m., Monday through Friday except legal holidays.


SUPPLEMENTARY INFORMATION:

I. Background


Section 110 of SARA amends section 104(i) of CERCLA by establishing requirements for the preparation of: (1) A list of hazardous substances found at NPL sites (in order of priority); (2) toxicological profiles of those substances, and (3) a research program to fill data gaps associated with the substances. The purpose of this notice is to identify the first 100 priority list substances and to provide a short summary of the methodology used by ATSDR and EPA to compile that list. Although the new statutory provisions have been added to CERCLA, this notice will refer to them as the section 110 requirements of SARA, to maintain a clear distinction in the notice between the new provisions and the existing requirements of CERCLA.

With regard to the priority list requirement, section 110 of SARA states that ATSDR and EPA:

shall prepare a list, in order of priority, of at least 100 hazardous substances which are most commonly found at facilities on the National Priorities List and which, in their sole discretion, they determine are posing the most significant potential threat to human health due to their known or suspected toxicity to human health due to their known or suspected toxicity to human health and the potential for human exposure to such substances at facilities on the National Priorities List or at facilities to which a response to a release or a threatened release under [CERCLA] is under consideration.

Section 110 further requires that the agencies prepare the first priority list within 6 months of the enactment of SARA (i.e., no later than April 17, 1987).

After compiling the first priority list, ATSDR must prepare toxicological profiles of the listed substances. Section 110 of SARA establishes a timetable for revising the priority list and preparing toxicological profiles of hazardous substances on the list; profiles of no fewer than 25 substances on the first priority list must be completed within 1 year of the enactment of SARA (by October 17, 1987). The profiles will be made available to the public, with a notice of availability and a request for public comment to be published in the Federal Register. The profiles will be revised as necessary in response to the public comments and additional data that subsequently become available to ATSDR (but no less often than once every three years). The toxicological profile process is described in greater detail in a notice which is published elsewhere in today's issue of the Federal Register.

The first priority list of 100 hazardous substances was prepared within 6 months of the enactment of SARA, as required by section 110. Unfortunately, ATSDR and EPA have not been able to solicit public comments on the preparation of the first priority list, because the time- constraints of SARA section 110 require the agencies to take extraordinary steps to expedite policy development and preparation of the first list and profiles. However, ATSDR and EPA have been as thorough as possible in compiling the first priority list, given the tight statutory timetable within which the agencies had no operate.

The methodology used to prepare the first priority list is summarized below. The agencies solicit public comment on this approach; such comments should be submitted in accordance with the instructions given in this notice. The listing process will be refined as future revisions of the list are prepared under less severe time-constraints. Later changes in the listing methodology will be based on comments received in response to this notice and on further evaluation of the process by ATSDR and EPA. All nonconfidential comments will be placed in the public file for this notice. A more detailed description of the listing methodology is contained in support documents which have been placed in the public file and are available for public review (see Unit V of this notice).

II. Methodology for Selecting Substances on the First Priority List

A. General Approach Taken by ATSDR and EPA

The hazardous substances listed in this notice were drawn from a list of 717 hazardous substances currently identified under section 102 of CERCLA. ATSDR and EPA used the CERCLA list to create a subset of hazardous substances which EPA has identified at National Priority List (NPL) sites. The two agencies then began a process of prioritizing that subset of hazardous substances based on the following three criteria for determining the degree to which each substance poses a potential human health risk: (1) Chemical toxicity, (2) frequency-of-occurrence of subset substances at NPL sites or other facilities, and (3) potential for human
exposure to the substances. These criteria reflect the requirements of SARA section 110, as well as the general practice of defining human health risk in terms of the toxicity and human exposure potential of a chemical substance.

B. Evaluation of Hazard Scoring Systems for Ranking Chemical Substances Under the Toxicity Criterion

The first step in prioritizing the subset of hazardous substances was the evaluation of existing hazard scoring systems and the selection of systems with the greatest applicability to the specific listing requirements in section 110 of SARA. In reviewing different hazard scoring systems, ATSDR and EPA focused on the evaluation of the toxicity ranking components of the systems; the exposure components of the scoring systems were not reviewed in detail, because they were considered more limited in their applicability to ranking of chemical risk under section 110. In addition, various approaches for characterizing frequency-of-occurrence and potential for human exposure were reviewed outside the context of the ranking schemes. These different approaches are discussed more fully in Units II.D. and II.E. of this notice.

ATSDR and EPA reviewed a number of hazard scoring systems for their degree of applicability to the ranking criterion of toxicity. Three general types of hazard scoring systems were identified:

1. Modeling schemes, which use a system of complex sub-models to combine the toxicological characteristics and environmental mobility and persistence of a substance into a single risk number, which takes into account chemical concentration at an exposure point (dose) and the probability of an effect as a function of dose.

2. Numerical schemes, which assign numerical sub-scores to the inherent toxicological and physical properties of a substance, and then combine the sub-scores into one or more hazard score(s).

3. General classification schemes, which assign chemical substances to hazard categories rather than assigning numerical sub-scores. The defining criteria for any hazard category can be quantitative or qualitative and, most often, can have a separate criterion component for toxicity, which could be used to provide a general grouping of chemical substances on the basis of toxicity.

The ATSDR and EPA review of potentially applicable scoring systems within these three categories was a two-tiered approach. Initially, scoring systems were screened to eliminate those systems that were not feasible because of large, site-specific data requirements (as required with modeling schemes), or that addressed only one type of toxic effect (usually acute toxicity). Each of these screening elements was considered to be a critical limitation of a particular scheme for its use in the toxicity ranking of substances under section 110 of SARA. In addition, systems which address only one type of toxic effect were eliminated from consideration.

Hazard scoring systems not eliminated by the initial screen were then evaluated in greater detail, based on the degree to which a substance's toxicity was characterized by each system, data quality and availability, the relevance of the scoring scheme for the toxicity ranking of hazardous substances under section 110, and any methodological flaws in the approach used to collect toxicity data. An ideal toxicity criterion ranking scheme should evaluate a wide range of toxic responses, distinguish between mild and severe toxic responses, have a readily available data base containing peer reviewed toxicology information, and use a relevant and plausible approach to combine toxicity data.

C. Selection of Reportable Quantity as the Hazard Scoring System for Ranking Chemical Substances Under the Toxicity Criterion

Based upon a comparison of the strengths and limitations of each scoring system reviewed, ATSDR and EPA selected the Reportable Quantity (RQ) scoring scheme for the toxicity ranking of hazardous substances under section 110 of SARA. The RQ scheme is described in several Federal Register documents (50 FR 13456, 51 FR 34535, and 52 FR 8140).

CERCLA section 103(a) requires that the person in charge of a vessel or facility notify the National Response Center immediately when there is a release of a hazardous substance in an amount equal to or greater than the reportable quantity for that substance. Section 102(b) of CERCLA establishes RQs for releases of hazardous substances at 1 pound, unless other reportable quantities were assigned to the substances under the Clean Water Act. CERCLA section 102(a) authorizes EPA to adjust all reportable quantities by regulation, and the Agency has done so for most of the 717 CERCLA hazardous substances.

ATSDR and EPA selected the RQ approach as a hazard scoring system for several reasons. It provides the most complete characterization of toxicity of all hazard scoring systems reviewed by the two agencies; all other schemes reviewed were more limited in either the consideration of different types of toxic effects, severity of effect, or potency. In addition, unlike most other ranking schemes, toxicity data used in the RQ approach are derived from primary, peer reviewed literature, and such data already are processed in a usable form for all hazardous substances frequently detected at NPL sites. Moreover, the determination of RQ health effect values utilizes weight-of-the-evidence considerations in the evaluation of data.

The RQ scoring system operates by correlating toxicity values to a tiered scale of RQ values (1, 10, 100, 1,000, and 5,000 pounds). For purposes of preparing the first priority list of hazardous substances, ATSDR and EPA used the lowest RQ value (representing the most severe human health hazard) for all candidate substances based upon acute mammalian toxicity, chronic mammalian toxicity, and carcinogenicity. The agencies did not use available RQ values for ignitability, reactivity, and aquatic toxicity of the substances, because these criteria were not considered relevant to the requirements and objectives of SARA section 110. Certain of the RQ health effect values were adjusted based on considerations of environmental persistence. The adjusted RQ value was the final figure for toxicity ranking under SARA section 110.

D. Selection of a Data Source Relating to the Criterion of Frequency-of-Occurrence

The second criterion used by ATSDR and EPA to prepare the first priority list of hazardous substances under section 110 of SARA was the frequency-of-occurrence of hazardous substances at NPL sites. The agencies evaluated various sources of data associated with this criterion. Ideally, frequency-of-occurrence data would include standardized monitoring data from sites on the NPL and would contain site-specific data on the frequency-of-detection and medium-specific location of hazardous substances at sites.

Using these data parameters for guidance, ATSDR and EPA decided to use Contract Laboratory Program (CLP) data for ranking substances under CERCLA frequency-of-occurrence criterion. The CLP is an EPA program which supports that Agency's hazardous waste activities by providing a range of state-of-the-art chemical analysis services of known quality. Many of the waste samples analyzed as part of site inspections and remedial investigations are part of the CLP EPA's central
The CLP survey has a number of limitations for purposes of the priority list exercise. Although the survey provides a statistically representative sample of CLP sites, it does not necessarily provide a representative sample of all NPL sites or all hazardous waste sites. In addition, the agencies determined frequency-of-occurrence from data on NPL and non-NPL sites, while section 110 of SARA requires a determination of frequently occurring substances at NPL sites only.

However, the CLP survey information was selected by ATSDR and EPA to determine the frequency-of-occurrence for hazardous substances at NPL sites because it represents the most comprehensive data available for identification of hazardous substances most commonly found at those sites. The survey provides a representative sample of existing data that has been derived under quality-assured and standardized analytical methods. The system is automated and thus provides easily accessed data for application to chemical frequency determinations under SARA.

E. Selection of Data Sources Relating to the Criterion of Potential for Human Exposure

ATSDR and EPA considered a third criterion in preparing the first priority list of hazardous substances under section 110 of SARA: the potential for human exposure to those substances. The agencies evaluated various sources of data associated with this criterion. Ideally, data for the characterization of exposure potential at hazardous waste sites would contain detailed, site-specific information on hazardous substance contaminants, as well as identification of known or potential human exposure pathways, characterization of potentially exposed populations, and a determination of expected exposure levels and duration at each exposure point.

Using these data parameters for guidance, ATSDR and EPA selected the following sources of data for use in ranking substances under the criterion of human exposure potential:

1. Surface water data, groundwater data, and indicator chemical substances. ATSDR and EPA used the CLP survey data to form a rough estimate of potential for human exposure to hazardous substances at NPL facilities. The agencies considered 3 types of exposure-related data from the CLP survey in prioritizing the list of 100 hazardous substances under SARA: the average concentration of the candidate substances detected in groundwater and surface water across the 386 NPL sites included in the CLP survey; the frequency of detection of those substances in groundwater and surface water across the 386 sites; and whether the substances had been selected for detailed exposure and risk assessment at Superfund Remedial sites (i.e., indicator substances).

The agencies believe that these data are the best readily available measures of potential human exposure. Groundwater and surface water are considered to be measures of mobility from the site and indicators of drinking water exposure. Many of the Superfund remedial actions to date have focused on protection from human health risks associated with contaminated drinking water. In addition, EPA has focused on indicator substances identified under CERCLA as substances for which the potential for human exposure has been determined to exist; ATSDR and EPA therefore recognized that the list of indicator substances should be used for the preparation of the first priority list under section 110 of SARA.

The use of CLP survey data for exposure characterization necessarily excluded considerations of environmental fate and mobility, exposure pathways, and population characteristics. In addition, skewed estimates of concentration derived from the CLP survey data were made from only a limited number of samples. However, the agencies believe that these limitations are outweighed by the fact that no other available data provide as accurate a measure of the potential for human exposure to hazardous substances at NPL sites:

2. Adjusted RQ values. As noted in Unit II.C. of this notice, RQ values may be adjusted for considerations of environmental persistence. This process involves adjusting the RQ values based on biodegradation, hydrolysis, and photolysis, collectively referred to as BHP. The BHP criteria were secondary to the primary RQ criteria of acute and chronic toxicity and carcinogenicity. The BHP criteria were used by ATSDR and EPA, where appropriate, to change the RQ value one level from the original value calculated with the primary criteria alone. The agencies based their use of these secondary criteria on the fact that substances which have a tendency to degrade to innocuous products pose a less serious health concern than equally toxic substances that have less tendency to degrade.

ATSDR and EPA also used other secondary criteria such as bioaccumulation, high reactivity, and hazardous degradation products to determine if an adjustment of RQ values was appropriate for a given substance. In cases where a degradation product was more toxic than the parent compound, the RQ value was adjusted downward.

The use of adjusted RQ values in the preparation of the first priority list ensured the consideration of a number of relevant exposure factors in this scoring exercise. However, the extent of this adjustment for each candidate substance was either "no change" or a one-level adjustment in the primary RQ value. The RQ adjustment thus served only as a crude indicator of the human exposure potential of those substances.

F. Generation of the Priority List

ATSDR and EPA used the ranking factors described above to represent the three criteria for determining the potential human health risk of the candidate substances. Toxicity was principally represented by RQ health effect values; frequency-of-occurrence was principally represented by CLP site percent data; the potential for human exposure was principally represented by data on groundwater, surface water, and indicator chemical substances. The agencies generated an algorithm to calculate a hazard index value for each candidate substance, for purposes of placing the substances on the first priority list.

The starting point for the hazard index calculation was the subset of hazardous substances which EPA had identified at NPL sites by means of site percent data from the CLP survey. The
agencies divided the site percent data
value for each substance (representing
frequency-of-occurrence) by the lowest
RQ value for the substance (based on
acute toxicity, chronic toxicity, or
potential carcinogenicity) to generate
a site index for each substance. ATSDR
and EPA ranked the candidate
substances based on their site indices.
The agencies then calculated an
exposure index for each substance by
ranking them based on the three
exposure-related factors (with each
factor receiving equal weight). The final
step in the algorithm was to combine the
site index rank and the exposure index
to value obtain a hazard index for each
substance. The substances were
prioritized based on their hazard
indices.

The algorithm for calculating the
hazard index is described in greater
detail in the support document for
this notice, which is contained in the
public file notice. Note that the hazard index
as described in this notice is not the same
as the hazard index described in the
Guidelines for Health Risk Assessment of
Chemical Mixtures (51 FR 34014,
September 24, 1986).

For purposes of assessing hazardous
substances in toxicity profiles, ATSDR
and EPA combined some of the
candidate substances into groups. If
substances are stereoisomers of one
another, are readily metabolized to
other substances on the list, or generally
are characterized as mixtures with
respect to toxicity and/or frequency-of-
ocurrence, they were grouped together
and occupy only one position on the
priority list. Examples of these types of
substances include: heptachlor and
heptachlor epoxide; endrin and endrin
aldehydeerdrin; aldrin and dieldrin; DDT,
DDE, and DDD; isomers of lindane
(BHC) and PCB’s.

C. Prioritization Within the First List of
100 Hazardous Substances

The list of 100 prioritized substances
has been separated into 4 priority
groups of 25 substances each. ATSDR
and EPA have listed the substances
within each group in order of their
Chemical Abstracts Services (CAS)
Registry numbers, to reflect the
somewhat inexact nature of the ranking
algorithm and the uncertainties of the
underlying data bases. The first (and
highest) priority group of 25 hazardous
substances is composed of the
substances which will be the subject of
the first toxicological profiles developed
under section 110 of SARA.

III. List of Substances

The following 100 hazardous
substances comprise the first priority list
of substances that will be the subject of
toxicological profiles prepared by
ATSDR. The substances are listed in 4
groups of 25 substances each. The four
groups are listed in descending order of
priority, with the first group having the
highest priority substances of the first
priority list. The substances within each
group are listed in CAS number order.

<table>
<thead>
<tr>
<th>PRIORITY GROUP 1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS No.</td>
<td>Substance name</td>
</tr>
<tr>
<td>50328</td>
<td>Benzo(a)pyrene</td>
</tr>
<tr>
<td>53703</td>
<td>Dibenzo(a,h)anthracene</td>
</tr>
<tr>
<td>56553</td>
<td>Benzo(a)anthracene</td>
</tr>
<tr>
<td>57125</td>
<td>Cyande</td>
</tr>
<tr>
<td>60571</td>
<td>Dieldrin/aldrin</td>
</tr>
<tr>
<td>67683</td>
<td>Chloroform</td>
</tr>
<tr>
<td>71452</td>
<td>Benzene</td>
</tr>
<tr>
<td>75014</td>
<td>Vinyl chloride</td>
</tr>
<tr>
<td>75092</td>
<td>Methylene chloride</td>
</tr>
<tr>
<td>75448</td>
<td>Heptachlor/heptachlor epoxide</td>
</tr>
<tr>
<td>79016</td>
<td>Trichloroethene</td>
</tr>
<tr>
<td>86506</td>
<td>N-nitrosodiphenylamine</td>
</tr>
<tr>
<td>106467</td>
<td>1,4-Dichlorobenzene</td>
</tr>
<tr>
<td>11781</td>
<td>Bis(2-ethylhexyl)phthalate</td>
</tr>
<tr>
<td>127184</td>
<td>Tetrachloroethene</td>
</tr>
<tr>
<td>205992</td>
<td>Benzo(b)fluoranthene</td>
</tr>
<tr>
<td>218019</td>
<td>Chrysene</td>
</tr>
<tr>
<td>1745016</td>
<td>P-Dioxin</td>
</tr>
<tr>
<td>7439921</td>
<td>Lead</td>
</tr>
<tr>
<td>7440020</td>
<td>Nickel</td>
</tr>
<tr>
<td>7440382</td>
<td>Arsenc</td>
</tr>
<tr>
<td>7440417</td>
<td>Beryllium</td>
</tr>
<tr>
<td>7440439</td>
<td>Cadmium</td>
</tr>
<tr>
<td>7440473</td>
<td>Chromium</td>
</tr>
<tr>
<td>11196825</td>
<td>PCB-1260,54,48,42,32,21,1016</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PRIORITY GROUP 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS No.</td>
<td>Substance name</td>
</tr>
<tr>
<td>56235</td>
<td>Carbon tetrachloride</td>
</tr>
<tr>
<td>57749</td>
<td>Chlorane</td>
</tr>
<tr>
<td>62759</td>
<td>N-nitrosodimethylamine</td>
</tr>
<tr>
<td>72559</td>
<td>4,4'-DDE, DDT, DDD</td>
</tr>
<tr>
<td>75003</td>
<td>Chloroethane</td>
</tr>
<tr>
<td>75274</td>
<td>Bromodichloromethane</td>
</tr>
<tr>
<td>75354</td>
<td>1,1-Dichloroethene</td>
</tr>
<tr>
<td>76891</td>
<td>Isophorone</td>
</tr>
<tr>
<td>78875</td>
<td>1,2-Dichloropropane</td>
</tr>
<tr>
<td>79005</td>
<td>1,1,2-Trichloroethene</td>
</tr>
<tr>
<td>79435</td>
<td>1,1,2,2-Tetrachloroethene</td>
</tr>
<tr>
<td>87865</td>
<td>Pentachlorophenol</td>
</tr>
<tr>
<td>91841</td>
<td>3,3'-Dichlorobenzidine</td>
</tr>
<tr>
<td>92875</td>
<td>Benzidine</td>
</tr>
<tr>
<td>107082</td>
<td>1,2-Dichloroethene</td>
</tr>
<tr>
<td>108983</td>
<td>Toluene</td>
</tr>
<tr>
<td>108952</td>
<td>Phenol</td>
</tr>
<tr>
<td>111444</td>
<td>Bis(2-chloroethyl)ether</td>
</tr>
<tr>
<td>121142</td>
<td>2,4-Dinitrotoluene</td>
</tr>
<tr>
<td>318964</td>
<td>BHC-alpha, gamma, beta, delta</td>
</tr>
<tr>
<td>542881</td>
<td>Bis(chloroethyl)ether</td>
</tr>
<tr>
<td>621697</td>
<td>N-nitrosodi-n-propylamine</td>
</tr>
<tr>
<td>7439979</td>
<td>Mercury</td>
</tr>
<tr>
<td>7440666</td>
<td>Zinc</td>
</tr>
<tr>
<td>7762492</td>
<td>Selenium</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PRIORITY GROUP 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS No.</td>
<td>Substance name</td>
</tr>
<tr>
<td>71556</td>
<td>1,1,1-Trichloroethane</td>
</tr>
<tr>
<td>74873</td>
<td>Chloromethane</td>
</tr>
<tr>
<td>75218</td>
<td>Oxane</td>
</tr>
<tr>
<td>75252</td>
<td>Bromoform</td>
</tr>
<tr>
<td>75343</td>
<td>1,1-Dichloroethane</td>
</tr>
<tr>
<td>84742</td>
<td>Di-N-butyl phthalate</td>
</tr>
<tr>
<td>88062</td>
<td>2,4,6-Trichlorophenol</td>
</tr>
<tr>
<td>91203</td>
<td>Naphthalene</td>
</tr>
<tr>
<td>98953</td>
<td>Nitrobenzene</td>
</tr>
<tr>
<td>100414</td>
<td>Ethylbenzene</td>
</tr>
<tr>
<td>107028</td>
<td>Acrolen</td>
</tr>
<tr>
<td>107131</td>
<td>Acrylonitrile</td>
</tr>
<tr>
<td>108907</td>
<td>Chlorobenzene</td>
</tr>
<tr>
<td>118741</td>
<td>Hexachlorobenzene</td>
</tr>
<tr>
<td>122667</td>
<td>1,2-Diphenyldrazenne</td>
</tr>
<tr>
<td>124461</td>
<td>Chlorobromomethane</td>
</tr>
<tr>
<td>156606</td>
<td>1,2-Trans-dichloroethene</td>
</tr>
<tr>
<td>193395</td>
<td>Indeno(1,2,3-cd)pyrene</td>
</tr>
<tr>
<td>606202</td>
<td>2,6-Dinitrotoluene</td>
</tr>
<tr>
<td>1330207</td>
<td>Total xylenes</td>
</tr>
<tr>
<td>7221834</td>
<td>Endrin aldehyde/endrin</td>
</tr>
<tr>
<td>7440224</td>
<td>Silver</td>
</tr>
<tr>
<td>7440508</td>
<td>Copper</td>
</tr>
<tr>
<td>7664417</td>
<td>Ammonia</td>
</tr>
<tr>
<td>8001352</td>
<td>Toxaphene</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PRIORITY GROUP 4</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS No.</td>
<td>Substance name</td>
</tr>
<tr>
<td>51285</td>
<td>2,4-Dinitrophenol</td>
</tr>
<tr>
<td>55057</td>
<td>P-Chloro-m-cresol</td>
</tr>
<tr>
<td>62533</td>
<td>Aniline</td>
</tr>
<tr>
<td>65850</td>
<td>Benzoc acid</td>
</tr>
<tr>
<td>67721</td>
<td>Hexachloroethane</td>
</tr>
<tr>
<td>74839</td>
<td>Bromomethane</td>
</tr>
<tr>
<td>75150</td>
<td>Carbontisulfide</td>
</tr>
<tr>
<td>75654</td>
<td>Fluorochloromethane</td>
</tr>
<tr>
<td>75718</td>
<td>Dichlorodifluoromethane</td>
</tr>
<tr>
<td>76933</td>
<td>2-Butanone</td>
</tr>
<tr>
<td>84662</td>
<td>Diethyl phthalate</td>
</tr>
<tr>
<td>85018</td>
<td>Phenanthrene</td>
</tr>
<tr>
<td>87683</td>
<td>Hexachlorobutadiene</td>
</tr>
<tr>
<td>95487</td>
<td>Phenol,2-methyl</td>
</tr>
<tr>
<td>95501</td>
<td>1,2-Dichlorobenzene</td>
</tr>
<tr>
<td>105679</td>
<td>2,4-Dimethylphenol</td>
</tr>
<tr>
<td>108101</td>
<td>2-Pentanone, 4-Methyl</td>
</tr>
<tr>
<td>120821</td>
<td>1,2,4-Trichlorobenzene</td>
</tr>
<tr>
<td>120832</td>
<td>2,4-Dichlorophenol</td>
</tr>
<tr>
<td>123911</td>
<td>1,4-Dioxane</td>
</tr>
<tr>
<td>13111</td>
<td>Dimethyl phthalate</td>
</tr>
<tr>
<td>206440</td>
<td>Fluoranthene</td>
</tr>
<tr>
<td>534521</td>
<td>4,6-Dinitro-2-methylphenol</td>
</tr>
<tr>
<td>541731</td>
<td>1,3-Dichlorobenzene</td>
</tr>
<tr>
<td>7440280</td>
<td>Thallium</td>
</tr>
</tbody>
</table>
should be submitted in accordance with the instructions given in that notice.

IV Submission of Key Studies

The very tight timetable mandated by Congress for the preparation of the first 25 toxicological profiles prevents the consideration of studies or other data not already in the possession of EPA and ATSDR. By the time any other studies could be submitted, ATSDR and EPA already will have begun development and peer review of the first profiles. Persons wishing to submit studies or other data on the first 25 toxicological profiles should note that such data will only be considered by ATSDR and EPA for purposes of revising the initial profiles after those profiles are issued. However, ATSDR and EPA are committed to an expeditious review of any submitted studies and to making any necessary revisions of the first 25 profiles in a timely manner.

Nevertheless, this Federal Register notice does solicit unpublished key studies on the first 100 priority list substances, particularly if the submitter believes that the data would substantially affect the determination of levels of significant human exposure or the identification of toxicological data needs. Such studies should be submitted to EPA in accordance with the instructions given in this notice. The voluntary submission of such data would aid in the revision of the first 25 profiles. In addition, for the remaining 75 hazardous substances on the first priority list, the supplementary data would help to ensure that ATSDR will have all key studies in its possession and peer reviewed by the time ATSDR begins to draft future toxicological profiles.

In order to be useful to ATSDR and EPA in the preparation of toxicological profiles, any studies that are submitted voluntarily must provide sufficient detail as to test materials, test methods, and results obtained to permit proper evaluation and peer review. If the study already has been peer reviewed, the submitter is requested to identify the peer reviewers and provide copies of their comments.

V Administrative Record

Although both ATSDR and EPA are issuing this notice, the agencies are establishing a single administrative record for the notice. EPA has established a public version of this record with non-confidential materials pertaining to this notice (docket control number OPTS-400003). The public file is available for inspection from 8 a.m. to 4 p.m., Monday through Friday, except legal holidays, in the OTS Reading Room, NE-G004, 401 M St., SW., Washington, DC 20460. At this time there are no confidential materials in the record.

The record includes support documents for the first priority list. Any non-confidential public comments on the listing methodology or other non-confidential data or studies will be available for public inspection. If a person intends to submit comments, data, or studies which contain confidential business information (CBI), the person must submit the materials in triplicate and mark the submissions as “confidential,” “trade secret,” or a similar designation. Any material which is marked as CBI will be handled in accordance with the procedures in 40 CFR Part 2. Any material which is not marked as CBI at the time it is submitted to EPA will be placed in the public file for this notice. ATSDR and EPA request that persons who submit CBI in response to this notice also submit a sanitized version of the materials which can be placed in the public file.

For the Agency for Toxic Substances and Disease Registry.
Dated: April 10, 1987
James O. Mason,
Administrator, Agency for Toxic Substances and Disease Registry.

For the Environmental Protection Agency.
Lee M. Thomas,
Administrator, Environmental Protection Agency.

[FR Doc. 87-5753 Filed 4-18-87; 8:45 am]
BILLING CODE 6560-50-M

(ATSDR-1; FRL-3174-9(b)
Guidelines for Development of Toxicological Profiles

AGENCIES: Department of Health and Human Services (DHHS) and Environmental Protection Agency (EPA).

ACTION: Notice.

SUMMARY: Under section 110 of the Superfund Amendments and Reauthorization Act (SARA), EPA and the Agency for Toxic Substances and Disease Registry (ATSDR) of DHHS are required to prepare guidelines for the development of toxicological profiles of hazardous substances listed under that Act. This notice describes the procedures and criteria to be used by ATSDR and EPA in developing toxicological profiles, and solicits public comment on these guidelines.

DATE: Written comments on this notice should be submitted by July 16, 1987
ADDRESS: Written comments and other data submitted in response to this notice should bear the docket control number ATSDR-1, and should be submitted to: Director, Office of External Affairs, Agency for Toxic Substances and Disease Registry, Chamblee 28 South, 1800 Clifton Rd., Atlanta, GA 30333.

All written comments on this notice will be available for public inspection at the Agency for Toxic Substances and Disease Registry, Building 28 South, Room 1103, 4770 Buford Highway, NE., Chamblee, GA, from 8 a.m. to 4:30 p.m., Monday through Friday, except legal holidays.

FOR FURTHER INFORMATION CONTACT:
Ms. Georgi Jones, Director, Office of External Affairs, Agency for Toxic Substances and Disease Registry, Chamblee 28 South, 1800 Clifton Rd., Atlanta, GA 30333, Telephone: (404-454-4620).

SUPPLEMENTARY INFORMATION:

I. Background


Section 101 of SARA amends section 104(i) of CERCLA by establishing requirements for the preparation of: (1) Lists of hazardous substances in order of priority, (2) toxicological profiles of those substances, and (3) a research program to fill data gaps associated with the substances. Although the new statutory provisions are being added to CERCLA, this notice will refer to them as the section 110 requirements of SARA, to maintain a clear distinction in this notice between the new provisions and the existing requirements of CERCLA.

Section 110 requires ATSDR and EPA to prepare a priority-order list of the hazardous substances which are most commonly found at facilities on the CERCLA National Priorities List (NPL) and which pose the most significant potential threat to human health. The agencies are required to revise the list on a periodic basis. The first priority list of 100 hazardous substances and a summary of the methodology used to prepare that list is published elsewhere in today’s issue of the Federal Register.

After compiling the first priority list, ATSDR must prepare toxicological profiles of the listed substances. SARA
establishes a timetable for revising the priority list and preparing toxicological profiles of hazardous substances on the list; profiles of no fewer than 25 substances on the first priority list must be completed within 1 year of the enactment of SARA (by October 17, 1987). The toxicological profiles will be provided to the States and made available to the public, with a notice of availability and a request for public comment to be published in the Federal Register. The profiles will be revised as necessary in response to the public comments and additional data that subsequently become available to ATSDR.

SARA section 110 requires that the toxicological profiles be prepared in accordance with guidelines developed by ATSDR and EPA. This notice summarizes the guidelines being used for the development of the initial set of 25 profiles. The 2 agencies may modify these guidelines for purposes of preparing subsequent profiles, based on their experience in preparing the first 25 profiles and on public comments received in response to this notice.

II. Statutory Responsibilities of ATSDR and EPA

ATSDR and EPA jointly developed the first priority list of hazardous substances as well as the guidelines for the preparation of the first 25 toxicological profiles. ATSDR has sole responsibility under SARA for the development and publication of all toxicological profiles. However, given the statutory time period for publishing the first 25 profiles, the 2 agencies have agreed to develop the initial profiles jointly, and will draw on the full range of available chemical data which have been submitted to EPA under that agency's various statutory mandates to support the development of the profiles.

An Interagency Agreement between ATSDR and EPA will provide the funding mechanism to support the contractors who will assist in the preparation of the first 25 profiles. The agencies will use approximately 5 contractors (for which contract mechanisms already are in place) to prepare and provide for peer review of the initial profiles. This joint effort between the 2 agencies is intended to ensure that the toxicological profile requirements of SARA section 110 will be met in a timely and cost-efficient manner. Competitive bids will be solicited for contractor assistance in the preparation of subsequent sets of toxicological profiles.

Both ATSDR and EPA will review and edit the products of the contractors' efforts, as necessary, to ensure their scientific accuracy and their conformance to the requirements of SARA section 110 and the guidelines discussed in this notice. After the profiles are completed and made available for public comment, the agencies will jointly review the comments which are received and make necessary changes in the profiles with the assistance of the contractors.

III. General Principles for the Development of Toxicological Profiles

ATSDR and EPA have agreed that the following general principles will apply to the preparation of the first 25 toxicological profiles:

1. The principal audiences for the profiles will be health professionals at the Federal, State, and local levels and members of the public involved with Superfund sites; ATSDR and EPA will make a special effort to solicit comments from the States, because the agencies are required by section 110 of SARA to provide profiles to the States.

2. Each profile will have a summary, written in non-technical language, for distribution to interested professionals and the general public.

3. The profiles will be developed in sufficient detail to meet the needs of health officials for current toxicological information on individual hazardous substances.

4. A primary function of the profiles will be to present and interpret the available toxicological and human data on the substances being profiled; these data may be used to evaluate the significance to individuals and the public-at-large of current or potential exposures to the subject hazardous substances. The profiles also will review the adequacy of available data on the substances and will identify toxicological data needs for which research programs should be designed and initiated pursuant to the requirements of section 110 of SARA.

5. The profiles will use existing assessment documents to the fullest extent consistent with the intent of SARA, plus new studies which subsequently become available to ATSDR and EPA. Studies which are key to the profiles will be critically reviewed.

6. As part of the development of the profiles, each profile will be peer reviewed in a manner consistent with the definition of peer review given in section 110 of SARA.

7. Toxicity data that are used to support the principal conclusions of a profile and which have not previously been peer reviewed will be subject to an independent peer review consistent with section 110 of SARA.

8. Generally, the level of detail in the profiles will be limited to summarizing the principal findings and conclusions of the studies which are found to be critical to evaluating the acute, subacute, chronic health effects of the subject hazardous substances.

These general principles for the development of toxicological profiles are reflected in the discussion below of the content of the profiles and the procedures for their development.

IV. Content of the Toxicological Profiles

Under section 110 of SARA, the toxicological profiles must contain, at a minimum, the following information:

A. An examination, summary, and interpretation of available toxicological information and epidemiologic evaluations on a hazardous substance in order to ascertain the levels of significant human exposure for the substance and the associated acute, subacute, and chronic health effects.

B. A determination of whether adequate information on the health effects of each substance is available or in the process of development to determine levels of exposure which present a significant risk to human health of acute, subacute, and chronic health effects.

C. Where appropriate, an identification of toxicological testing needed to identify the types or levels of exposure that may present significant risk of adverse health effects in humans.

Congress stated further that the development and implementation of a research program under section 110 of SARA must be coordinated "with the National Toxicology Program and with programs of toxicological testing established under the Toxic Substances Control Act and the Federal Insecticide, Fungicide, and Rodenticide Act. The purpose of such coordination shall be to avoid duplication of effort and to assure that the hazardous substances listed pursuant to section 110 of SARA are tested thoroughly at the earliest practicable date."

ATSDR and EPA have developed a detailed format which will serve as the guidelines for the content of the first 25 toxicological profiles. The format is presented in outline form in Appendix A to this notice. The agencies do not believe it is necessary for the initial profiles to include or refer to every major study of the first 25 substances, because such a comprehensive overview would repeat work that already has been done elsewhere and therefore is not necessary for the audience and purpose intended.

ATSDR and EPA have determined that the primary focus of the
toxicological profiles should be on the data most relevant for evaluating levels of significant human exposure and the acute, subacute, and chronic health effects of the subject hazardous substances (i.e., each profile will identify the quantity of a substance which represents a level of potential exposure that would constitute a public health concern based on available data). The agencies will consider multiple levels of exposure for each substance, and will evaluate more than one route of exposure (dermal, oral, and inhalation) and more than one exposure duration (short and long term). The profiles will discuss key studies which relate to the determination of significant levels of human exposure. There has been considerable discussion between ATSDR and EPA on how these determinations should be made, and it is clear that the concepts will evolve as the first toxicological profiles are developed in the coming months.

The toxicological profiles also must focus on important data needs that preclude the determination of significant levels of human exposure or contribute substantially to the uncertainty of such levels. With regard to the identification of these data needs, the agencies will assess the quality of the data which support the determination of significant human exposure levels and, where major gaps in the supporting data exist, identify those data needs in the toxicological profiles.

Since these discussions will be the core of the profiles, ATSDR and EPA expect most of the public comments on the first 25 toxicological profiles to focus on these subject areas. Each profile will include a non-technical summary of the document's principal findings and conclusions.

V. Support Data in the Profiles

The first 25 toxicological profiles will be based primarily on publicly available documents, studies, reports, and other data. The agencies and their contractors then will identify key studies which can appropriately serve as the basis for determining exposure levels which present a significant human health risk.

For many of the first 25 hazardous substances that are the subject of profiles, there have been recent chemical assessments done by EPA or other agencies which will assist ATSDR and EPA in identifying key studies for the purpose of drafting the toxicological profiles. In addition, there are extensive files of relevant studies within EPA and other Federal agencies which will be reviewed and evaluated.

The agencies and their contractors may identify key studies which support the determination of significant human exposure levels or the identification of data needs, which have not previously been peer reviewed. In the case of such studies, the contractors will arrange for expert peer review to evaluate the data in the studies and determine the validity of the studies. These experts will also evaluate the adequacy of the data for characterizing toxicity and serving as key data in toxicological profiles.

It is possible that there are unpublished studies, currently unknown to ATSDR and EPA, which could be key studies for the development of certain toxicological profiles. The Federal Register notice containing the first priority list of hazardous substances, published elsewhere in today's issue of the Federal Register, discusses the procedures for handling the voluntary submission of such data to support the development of toxicological profiles.

VI. Scientific Peer Review of Toxicological Profiles

In order to ensure that the toxicological profiles developed under section 110 of SARA are of high scientific and technical quality, ATSDR and EPA have taken steps to ensure that the toxicological profiles themselves are properly peer reviewed. The contractors responsible for the preparation of toxicological profiles will assemble a peer review panel for each hazardous substance which is the subject of a toxicological profile.

Each peer review panel will consist of no less than 3 and no more than 7 experts who collectively have knowledge of the substance's physical and chemical properties, toxicokinetics, key health endpoints in animals and humans, mechanisms of action, human exposure, and quantification of risk to humans. The experts will have distinguished themselves through research, publications, and peer recognition as being highly qualified to serve as peer reviewers of studies and evaluations of the substance in question. ATSDR and EPA will ensure that the chosen experts do not have a conflict of interest in their peer review of toxicological profiles of specific substances.

This contractor-conducted peer review, plus an internal review by scientific experts within ATSDR and EPA, will be conducted before the first 25 toxicological profiles are made available for public comment.

VII. Solicitation of Public Comments and Other Data

A. Comments on the Process in General

ATSDR and EPA solicit comments on their implementation of the entire toxicological profile process. Under section 110 of SARA, including the preparation of the priority lists of hazardous substances, the guidelines for preparing the profiles, and the content, format, and scope of the profiles. (For details on the methodology for preparing the priority lists of hazardous substances, see the joint notice published elsewhere in today's issue of the Federal Register.

Unfortunately, the agencies will not be able to make use of public comments in preparing the initial priority list of 100 substances and the first 25 toxicological profiles of substances on that list, because the time-constraints of SARA section 110 require ATSDR and EPA to take extraordinary steps to expedite policy development and preparation of the first list and profiles. However, public comments on the process will be used to revise the process, if necessary, prior to the preparation of subsequent lists and profiles. All public comments will be available for review in the public file for this notice.

B. Comments on the First 25 Profiles

The Federal Register notice announcing the availability of the first 25 toxicological profiles (scheduled to be published no later than October 17, 1987) will solicit public comments on those profiles, and is expected to establish a 90-day comment period to ensure that there will be adequate time for the public to review and comment on the initial toxicological profiles.

VIII. Administrative Record

Although both ATSDR and EPA are issuing this notice, the agencies are establishing a single administrative record for the notice. ATSDR has established the public record of materials pertaining to this notice (docket control number ATSDR–1). The record is available for public inspection from 8 a.m. to 4:30 p.m., Monday through Friday, except legal holidays, at the Agency for Toxic Substances and Disease Registry, Building 26 South, Room 1103, 4770 Buford Highway, NE., Chamblee, GA. The record includes support documents for the toxicological profile process.

For the Agency for Toxic Substances and Disease Registry:
I. PROFILES

APPENDIX—TOXICOLOGICAL PROFILES OUTLINE

I. Introduction

A. Purpose. A description of the purpose/intent for this profile as outlined in SARA.

B. Objectives. Contains a brief discussion of the objectives for this profile, including the intended audience, as outlined in SARA.

C. Responsible parties/ agencies.

II. Health Effects Statement

This section of the profile, if removed from the rest of the document, should still be capable of conveying to the general public the substantive public health concerns associated with this substance. This section should be a health effects summary, written in layman’s terms, to address issues such as:

A. Whether the substance is naturally occurring, synthetic only, or both.

B. How it is commonly used and where it is commonly encountered.

C. What its toxicity and hazards are (signs and general symptoms; acute, chronic, carcinogenicity, birth defects, etc.).

D. The potential for exposure via water, air, foodstuffs, commercial products, etc.

E. General statement on persistence in the environment.

F. Whether the substance is essential to human health; i.e., an essential nutrient.

G. A discussion of the relative benefit to society versus the risk.

H. A discussion or explanation of certain areas that may affect the layman’s interpretation of the risk imposed by that particular substance. For example, vinyl chloride in its pure gaseous or liquid form is an extremely toxic (acute and chronic) and carcinogenic agent. However, it is most commonly encountered in polymeric form in plastics and, as such, is relatively inert and therefore harmless. A brief explanation of such would be appropriate here to avoid any misconception by the general public regarding risk through the use of vinyl chloride-containing plastics.

I. General discussion. This subsection should serve as a fairly complete and concise statement of the general health risks associated with the subject hazardous substance.

III. Chemical Identity

A. Structure

1. CAS Registry number.

2. Molecular formula.

3. Chemical structure.

4. Chemical name (using current Collective Index).

5. Synonyms.

6. Trade names: To include names and makeup of commercial preparations utilizing this particular substance.

B. Analytical Methods

Should include an up-to-date listing of analytical methods (with detection limits and degree of accuracy) available for analysis in the following:

1. Environmental media.

   a. Air.

   b. Water.

   c. Soil.

   d. Food/food products.

2. Biomedical samples.

   a. Fluids/exudates:

      i. Blood/serum/plasma.

      ii. Urine.

      iii. Saliva.

      iv. Seminal fluid.

   b. Tissues:

      i. Adipose.

      ii. Muscle.

      iii. Hair, nails, skin.

   c. Other biopsy material as available.

C. General Discussion

IV Environmental Fate and Human Exposure Potential

A. Environmental Background Levels

1. Water.

2. Air.


4. Foodstuffs.

5. Other products.

B. Release to Environment

1. Point source.

2. Non-point source.

C. Environmental Fate

1. Transport and partitioning.

   a. Within media.

   b. Between media.

2. Transformation and degradation.

   a. Chemical degradation (or transformation).

   b. Biodegradation (or biotransformation).

   c. Bioaccumulation/bioconcentration.

D. Human Exposure

1. Normal background exposure.

2. Media-specific exposure (certain foodstuffs, water in certain areas, etc.).

3. Special risk populations.

4. Occupational exposures.

E. General Discussion

V. Toxicokinetics/Pharmacokinetics

A. Absorption

Various exposure routes; inhalation, oral, dermal.

1. Animal studies.

2. Human.

B. Distribution

Identifies specific storage sites and depots.

1. Animal studies.

2. Human.

C. Metabolism

Identifies biotransformation pathways, metabolic products.

1. Animal studies.

2. Human.

D. Excretion

Identifies routes, time, products.

1. Animal studies.

2. Human.

E. General Discussion

VI. Toxicity

A. In Vitro Toxicity

1. Enzyme systems (e.g., AChEI, MAO).

2. Biochemical alterations (e.g., free radical formation).

3. Cellular system (e.g., monolayer cell culture systems).

4. Toxicity of metabolic products.

5. Proposed mechanism(s) of toxicity.

B. Animal Toxicity

The following subsections should all include a listing and discussion of the various toxic effects produced, the relative potency (dose-effect), the target organs/systems, and the mechanism(s) of action, if known.

1. Acute toxicity.

2. Subacute/subchronic toxicity.

3. Chronic toxicity.


5. Reproductive and developmental toxicity.

6. Carcinogenicity.

7 Toxicity of metabolic (biotransformation) products.

8. Mechanism(s) of toxicity.

C. Human Toxicity

1. Case reports.

   a. Synopsis of findings.

   b. Synopsis of conclusions.

2. Epidemiological studies.

   a. Acute toxicity.
<table>
<thead>
<tr>
<th>Section</th>
<th>Subsections</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>b. Subacute/subchronic toxicity.</strong></td>
<td>A. Conclusions Regarding Adequacy/Inadequacy of Existing Information</td>
</tr>
<tr>
<td><strong>c. Reproductive and developmental toxicity.</strong></td>
<td>B. Discussions Regarding Information Currently Under Development</td>
</tr>
<tr>
<td><strong>d. Carcinogenicity.</strong></td>
<td>C. General Discussion</td>
</tr>
<tr>
<td><strong>f. Toxicity of metabolic (biotransformation) products.</strong></td>
<td>IX. Physical Chemical Information</td>
</tr>
<tr>
<td><strong>g. Mechanism(s) of toxicity.</strong></td>
<td>A. Physical/Chemical Properties</td>
</tr>
<tr>
<td><strong>a. Acute toxicity.</strong></td>
<td>2. Color</td>
</tr>
<tr>
<td><strong>d. Reproductive and developmental toxicity.</strong></td>
<td>5. Melting/boiling points.</td>
</tr>
<tr>
<td><strong>e. Carcinogenicity.</strong></td>
<td>6. Autoignition temperature.</td>
</tr>
<tr>
<td><strong>f. Toxicity of metabolic (biotransformation) products.</strong></td>
<td>7. Solubility: water, organic solvents.</td>
</tr>
<tr>
<td><strong>g. Mechanism(s) of toxicity.</strong></td>
<td>8. Density: vapor density.</td>
</tr>
<tr>
<td><strong>a. Acute toxicity.</strong></td>
<td>10. Partition coefficient(s).</td>
</tr>
<tr>
<td><strong>b. Subacute/subchronic toxicity.</strong></td>
<td>11. Vapor pressure.</td>
</tr>
<tr>
<td><strong>d. Reproductive and developmental toxicity.</strong></td>
<td>13. Refractive index.</td>
</tr>
<tr>
<td><strong>e. Carcinogenicity.</strong></td>
<td>14. Flashpoint.</td>
</tr>
<tr>
<td><strong>f. Toxicity of metabolic (biotransformation) products.</strong></td>
<td>15. Flammable limits.</td>
</tr>
<tr>
<td><strong>g. Mechanism(s) of toxicity.</strong></td>
<td><strong>B. General Discussion</strong></td>
</tr>
<tr>
<td><strong>D. General Discussion</strong></td>
<td><strong>X. Manufacture, Importation, and Use</strong></td>
</tr>
<tr>
<td><strong>1. Potential for human toxicity.</strong></td>
<td>A. Production</td>
</tr>
<tr>
<td><strong>3. What is the relevance of these findings to the potential for human toxicity?</strong></td>
<td>2. Volume.</td>
</tr>
<tr>
<td><strong>VII. Levels of Significant Human Exposure</strong></td>
<td>3. Sites of production.</td>
</tr>
<tr>
<td><strong>Specific guidance for this section will be provided in a follow-up report.</strong></td>
<td>4. Disposal.</td>
</tr>
<tr>
<td><strong>A. Conclusions Regarding Levels of Significant Human Exposure.</strong></td>
<td><strong>B. Importation</strong></td>
</tr>
<tr>
<td><strong>1. Acute health effects.</strong></td>
<td><strong>C. Uses</strong></td>
</tr>
<tr>
<td><strong>2. Subacute/subchronic health effects.</strong></td>
<td><strong>D. General Discussion</strong></td>
</tr>
<tr>
<td><strong>3. Chronic health effects.</strong></td>
<td><strong>XI. Regulatory and Advisory Status</strong></td>
</tr>
<tr>
<td><strong>B. General Discussion</strong></td>
<td>A. Regulatory (Enforceable) Standards</td>
</tr>
<tr>
<td><strong>VIII. Adequacy of Available Information</strong></td>
<td>1. Definition.</td>
</tr>
<tr>
<td><strong>Specific guidance for this section to be provided in a follow-up report.</strong></td>
<td>2. Purpose and use.</td>
</tr>
<tr>
<td><strong>2. Purpose and use.</strong></td>
<td>3. Advising agency.</td>
</tr>
<tr>
<td><strong>3. Advising agency.</strong></td>
<td>4. Definitive levels/quantity, units, media.</td>
</tr>
<tr>
<td><strong>C. General Discussion</strong></td>
<td><strong>C. General Discussion</strong></td>
</tr>
<tr>
<td><strong>2. Comparison of long-term, low level exposure to short-term, high level exposure.</strong></td>
<td><strong>XII. Summary and Recommendations</strong></td>
</tr>
<tr>
<td><strong>VIII. Adequacy of Available Information</strong></td>
<td>Provides a summary review and discussion of all the preceding “General discussion” subsections.</td>
</tr>
<tr>
<td><strong>Specific guidance for this section to be provided in a follow-up report.</strong></td>
<td><strong>A. Synopsis</strong></td>
</tr>
<tr>
<td><strong>2. Purpose and use.</strong></td>
<td>Of relevant in vitro, animal, and human research findings.</td>
</tr>
<tr>
<td><strong>3. Advising agency.</strong></td>
<td>1. Includes a review of homologous, inter-species toxic mechanisms.</td>
</tr>
<tr>
<td><strong>4. Definitive levels/quantity, units, media.</strong></td>
<td>2. Includes an assessment of the potential for adverse human health effects based on in vitro and/or non-human in vivo toxicity evaluations.</td>
</tr>
<tr>
<td><strong>IX. Physical Chemical Information</strong></td>
<td><strong>B. Assessment</strong></td>
</tr>
<tr>
<td><strong>A. Physical/Chemical Properties</strong></td>
<td>Of potential exposure scenarios.</td>
</tr>
<tr>
<td><strong>1. Molecular weight.</strong></td>
<td><strong>C. Recommendations</strong></td>
</tr>
<tr>
<td><strong>2. Color.</strong></td>
<td>For future research, as deemed appropriate and necessary. Note:</td>
</tr>
<tr>
<td><strong>3. Physical state.</strong></td>
<td>Specific guidance for developing this subsection will be provided in a follow-up report.</td>
</tr>
<tr>
<td><strong>4. Odor/odor threshold.</strong></td>
<td><strong>XIII. Appendices to Toxicological Profiles</strong></td>
</tr>
<tr>
<td><strong>5. Melting/boiling points.</strong></td>
<td><strong>A. Data Bases Reviewed</strong></td>
</tr>
<tr>
<td><strong>6. Autoignition temperature.</strong></td>
<td><strong>B. Unpublished Documents Cited</strong></td>
</tr>
<tr>
<td><strong>7. Solubility: water, organic solvents.</strong></td>
<td><strong>C. Peer Review Process</strong></td>
</tr>
<tr>
<td><strong>9. Specific gravity.</strong></td>
<td>2. Identification of peer review members (and their affiliation).</td>
</tr>
<tr>
<td><strong>10. Partition coefficient(s).</strong></td>
<td>3. A listing of those peer review comments not incorporated into the profile, with a brief explanation of the rationale for their exclusion.</td>
</tr>
<tr>
<td><strong>11. Vapor pressure.</strong></td>
<td><strong>D. Reference Section</strong></td>
</tr>
<tr>
<td><strong>12. Henry's Law constant.</strong></td>
<td>[FR Doc. 87-8754 Filed 4-16-87; 8:45 am]</td>
</tr>
<tr>
<td><strong>13. Refractive index.</strong></td>
<td>BILLING CODE 6560-50-M</td>
</tr>
</tbody>
</table>
Part IV

Environmental Protection Agency

40 CFR Part 141

Water Pollution Control; National Primary Drinking Water Regulations—Volatile Synthetic Organic Chemicals; Para-Dichlorobenzene; Proposed Rule
ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 141 and 142

[WH-FRL-3139-4]

Water Pollution Control; National Primary Drinking Water Regulations—Volatile Synthetic Organic Chemicals; Para-Dichlorobenzene

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed rule.

SUMMARY: This action is proposed under the Safe Drinking Water Act (SDWA), as amended on June 19, 1986 [Pub. L. 99-339, 100 Stat. 642 (1986)]. The Environmental Protection Agency (EPA) is proposing to amend the Maximum Contaminant Level Goal (MCLG) and repropose the Maximum Contaminant Level (MCL) for para-dichlorobenzene (p-dichlorobenzene) in drinking water.

Based on new data, the Agency is proposing to regulate p-dichlorobenzene as a probable human carcinogen and that the MCLG should be amended to zero and the MCL should be 0.005 mg/l. However, the Agency is also requesting comment on the evidence used to reclassify this substance. If after considering public comment on this proposal, the Agency determines that p-dichlorobenzene is a Group C compound (limited evidence of carcinogenicity), then the MCLG and MCL will be set at 0.075 mg/l.

An MCLG is a non-enforceable health goal which must be set at the level which will result in no known or anticipated adverse health effect with an adequate margin of safety. An MCL is an enforceable standard for a substance in drinking water which must be set as close to the MCLG as is feasible with the use of the best technology, treatment techniques, and other means which are available (taking cost into consideration).

On November 13, 1985, EPA promulgated a Recommended Maximum Contaminant Level (RMCL), now called “MCLG” under the terminology of the 1986 SDWA Amendments, for p-dichlorobenzene of 0.75 mg/l and proposed an MCL of 0.75 mg/l (50 FR 46880 and 50 FR 46902, November 13, 1985). This notice proposes to amend the MCLG and the MCL based upon new health effects data for p-dichlorobenzene which have recently become available and which indicate that there is sufficient evidence to support the conclusion that the compound is a probable human carcinogen. EPA will publish the MCLG and promulgate the MCL for p-dichlorobenzene when it promulgates the MCLs for the other volatile organic chemicals (VOCs), which were also proposed on November 13, 1985.

In this notice, the Agency also requests public comment on the proposed provision that, in some instances, primacy agents may require point-of-use (POU) devices or bottled water as a condition for receiving variance or exemption from the NPDES for VOCs. Public comment is also solicited on the proposed conditions of use for POU devices and bottled water.

DATES: Written comments should be submitted on or before May 18, 1987.

A public hearing has been scheduled for May 4, 1987 from 8:00 a.m. to 12:00 p.m.

ADDRESSES: Send written comments on this proposed rule to p-DCB Comment Clerk, Criteria and Standards Division, Office of Drinking Water (WH-550), Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460. A copy of the comments and supporting documents will be available for review during normal business hours at EPA, Room 2904 (rear), 401 M Street, SW., Washington, DC 20460. Supporting documents cited in this notice will be available for inspection at the Drinking Water Supply Branches in EPA’s Regional Offices.

The public hearing will be held in Washington, DC—EPA (North Conference Center, Room 3) Waterside Mall, 401 M St. SW., Washington, DC 20460.

FOR FURTHER INFORMATION CONTACT: Joseph A. Cotruvo, Ph.D., Director, Criteria and Standards Division, Office of Drinking Water (WH-550), Environmental Protection Agency, 401 M Street, SW., Washington, DC 20460, telephone (202) 382-7575.

For information on the hearing contact: Teresa Malone, EPA (WH-550D), 401 M St. SW., Washington, DC 20460. Phone: 202/382-7575.

SUPPLEMENTARY INFORMATION:

EPA Regional Offices:

I. JFK Federal Bldg., Room 2203, Boston, MA 02203, Phone: (617) 223-6486, Jerome Healy
II. 26 Federal Plaza, Rm. 824, New York, NY 10278, Phone: (212) 264-1800, Walter Andrews
III. 841 Chestnut Street, Philadelphia, PA 19107 Phone: (215) 597-9873, John Capacasa
IV. 345 Courtland St., NE, Atlanta, GA 30365, Phone: (404) 861-3781, Robert Jourdan

V. 230 S. Dearborn St., Chicago, IL 60604, Phone: (312) 866-3781, Joseph Harrison
VI. 1201 Elm Street, Dallas, TX 75270, Phone: (214) 767-2820, James Graham
VII. 726 Minnesota Ave., Kansas City, KS 66101, Phone: (913) 230-2815, Gerald-R. Foree
VIII. 999 16th St., Suite 500, Denver, CO 80202-2413, Phone: (303) 293-1413, Marc Alston
IX. 215 Fremont Street, San Francisco, CA 94105, Phone: (415) 974-8076, William Thurston
X. 1200 Sixth Avenue, Seattle, WA 98101, Phone: (206) 599-4092, Richard Theel

Table of Contents

I. Statutory Requirements and Regulatory Background
II. MCLG for p-Dichlorobenzene—Background
III. MCLG for p-Dichlorobenzene—Proposed Amendment
IV. Reproposed MCL for p-Dichlorobenzene
A. Technologies
B. Costs
C. Analytical Methods
D. Determination of the MCL
V. Technology and Compliance for Variances and Exemptions
VI. Compliance Monitoring Requirements
VII. Public Notice Requirements
VIII. Economic Impact Assessment
IX. Other Statutory Requirements
X. References and Request for Public Comment
XI. List of Subjects

I. Statutory Requirements and Regulatory Background

The Safe Drinking Water Act, as amended in 1986 (Public L. No. 99-339, 100 Stat. 642) ("SDWA" or "the Act") requires EPA to establish maximum contaminant level goals (MCLGs) for contaminants which in the judgment of the Administrator may have any adverse effect on the health of persons and which are known or anticipated to occur in public water systems. Section 1412(b)(3)(A). MCLGs are to be set at a level which, in the Administrator’s judgment, “no known or anticipated adverse effects on the health of persons occur and which allow an adequate margin of safety.” Section 1412(b)(4). MCLGs are nonenforceable health goals.

An MCLG must be proposed at the same time EPA proposes a national primary drinking water regulation (NPDSR). An NPDSR establishes either: (a) A maximum contaminant level (MCL) or (b) a treatment technique for a contaminant. EPA may promulgate a treatment technique only if it is not “economically or technologically feasible.”
feasible” to ascertain the level of a contaminant in drinking water. MCLs must be set as close to the MCLGs as is feasible. Under the Act, “feasible” means “feasible with the use of the best technology, treatment techniques and other means, which the Administrator finds, after examination for efficacy under field conditions and not solely under laboratory conditions, are available (taking cost into consideration).” Section 1412(b)(6). Each national primary drinking water regulation which establishes an MCL must list the best available technology treatment techniques, and other means (“BAT”) which are feasible for meeting the MCL. Section 1412(b)(6).

Under section 1415(a)(1)(A) of the SDWA, a State which has primary enforcement responsibility for public water systems, i.e., “primacy” (or EPA in the absence of State primacy), may grant variances from a national primary drinking water regulation to systems which cannot meet the requirements of an NPDES or for other physical or testing procedure required by a NPDES, or (2) failure to comply with any monitoring required pursuant to Section 1445 of the Act.

The Administrator shall propose and promulgate a finding of the best available technology, treatment techniques or other means available for each contaminant for purposes of this subsection at the time he proposes and promulgates a maximum contaminant level for each such contaminant. The Administrator’s finding of best available technology, treatment techniques or other means for purposes of this subsection may vary depending on the number of persons served by the system or for other physical conditions related to engineering feasibility and costs of compliance with maximum contaminant levels as considered appropriate by the Administrator.

Section 1414(c) requires each owner or operator of a public water system to give notice to persons served of (1) any failure to comply with a maximum contaminant level, treatment technique, or testing procedure required by a NPDES, or (2) failure to comply with any monitoring required pursuant to Section 1445 of the Act.

The SDWA requires regulation of 83 contaminants by June 19, 1989. p-Dichlorobenzene is one of these contaminants which is to be regulated.

II. MCLG for p-Dichlorobenzene—Background

A. Occurrence

In 1982, EPA conducted a Ground Water Supply Survey (GWSS) which sampled approximately 1000 drinking water supplies which use ground water as a source. Five hundred ground water supplies were selected at random and 500 were selected by States as having high potential for contamination by organic chemicals. p-Dichlorobenzene was detected in 5 supplies out of 466 from the random sample (maximum concentration: 0.0013 mg/l) and 4 supplies out of 479 from the nonrandom sample (maximum concentration: 0.0099 mg/l). Results were not available, from the remaining 55 samples.

p-Dichlorobenzene has been detected in other national and State surveys at levels mostly less than 0.001 mg/l, but a few values ranged up to 0.009 mg/l.

B. Health Effects

In its November 13, 1985 Federal Register notice, which promulgated MCLGs for certain volatile organic compounds, EPA classified these compounds according to the strength of evidence of carcinogenicity based on EPA’s proposed Guidelines for Carcinogen Risk Assessment (49 FR 48294). These guidelines, which have since been promulgated as 51 FR 55588, November 13, 1985). This MCLG, which was not challenged, was based upon the compound’s classification in Group D and Category III (inadequate evidence of carcinogenicity to humans). The MCLG was based on chronic toxicity data from several negative carcinogenicity studies in rats and mice, including one chronic inhalation study and several subchronic inhalation and gavage studies. The compound had been shown to induce mitotic division in higher plants, but was negative for mutagenicity in bacterial assays and in studies on experimental animals (the dominant lethal study was in mice and the cytogenic study was in rat bone marrow cells). The November 1985 notice provides additional discussion of the basis for the MCLG for p-dichlorobenzene (50 FR 46680).

A suggested reference dose (RFD) of 3.75 mg/l for paradichlorobenzene considering adverse health effects other than carcinogenic potential was calculated. This value was based upon the rat subchronic gavage study (see EPA d. Battelle, 1980 b) which served as the dose range-finding study for the NTP bioassay. The RFD was based upon a NOAEL of 150 mg/kg/day. A total uncertainty factor of 1000 was used (100 and 10) to account for interspecies extrapolation and use of data from an exposure duration significantly less than lifetime. The MCLG was based upon the RFD of 3.75 mg/l and 20% drinking water contribution.

III. MCLG for p-Dichlorobenzene—Proposed Amendment

EPA is proposing to amend the MCLG for p-dichlorobenzene to zero. As an alternative, EPA is proposing to amend the MCLG to 0.075 mg/l if, after public comment EPA determines that the weight of evidence indicates a reclassification of p-dichlorobenzene as a Group C substance.

...
EPA has reviewed two chronic toxicity and carcinogenicity studies, several subchronic toxicity studies and a variety of mutagenicity studies in its assessment of the carcinogenic potential of p-dichlorobenzene. These studies are described more fully below and also in the criteria document (EPA). (See Section X, References and Request for Public Comment.)

A draft report of the recently completed National Toxicology Program (NTP) bioassay on p-dichlorobenzene (NTP Toxicology and Carcinogenesis Studies of 1,4-Dichlorobenzene in F344/N Rats and B6C3F1 Mice, 1988), in which p-dichlorobenzene was administered by gavage to F344/N rats and B6C3F1 mice, indicated positive results (EPA).

Specifically, the bioassay demonstrated treatment-related increases in the incidence of renal tubular cell adenocarcinomas in male rats and in the incidences of hepatocellular carcinomas and hepatocellular adenomas in male and female mice. Hepatoblastomas, rare tumor type in this mouse strain, were also found in male mice. This report has been reviewed by the NTP Board of Scientific Counselors (March 28, 1988) and is expected to be issued as a final report in the near future. EPA believes that this report has been sufficiently well-reviewed for consideration as part of the overall evidence on p-dichlorobenzene. If the conclusions of the final report differ from the draft report, EPA will reconsider this proposal to amend the MCL.

The other available long-term (76 weeks exposure, 38 weeks further observation) carcinogenicity study revealed no treatment-related increase in tumor incidence or tumor type. This study (Riley et al. 1980) exposed Alderley Park rats to inhalation concentration of 75 and 500 ppm. At the higher level, observable effects were an increase in organ weights (both sexes) and an increase in urinary protein and coproporphyrin output (males).

Several subchronic toxicity studies with para-dichlorobenzene have been reported. The length of these studies were as follows: 13 weeks in rats and mice exposed orally (NTP 1988), 192 days in rats and 367 days or less in rabbits, both exposed orally (Hollingworth et al., 1956), and 67 months or less in rats, rabbits, and guinea pigs exposed by inhalation (Hollingworth et al., 1956). Oral doses were given daily, 5 days/week, and inhalation exposures were 7 hours daily, 5 days/week. Toxic signs from treatment were evidence in each of these studies, with lesions and weight changes of liver and kidney prominent, but treatment-related carcinogenicity was not evident. However, exposures and survival were too short in these studies for an adequate assessment of carcinogenicity.

Para-Dichlorobenzene has been reported as negative for mutagenicity in several strains of Salmonella typhimurium (Anderson et al. 1972; Anderson, 1976; Simons et al. 1978; Haworth et al., 1983; Shimizu et al., 1983; and NTP 1986) and an Escherichia coli WP2 system. Para-Dichlorobenzene has been reported to increase back mutation frequency in the fungus Aspergillus nidulans (Prasad and Palmer, 1980; Prasad, 1970) and abnormal mitotic division in higher plants (Sharma and Battisharya, 1956; Sharma and Sarkar, 1957; Sruvastava, 1968; and, Gupta, 1972). para-Dichlorobenzene did not increase forward mutations in mouse lymphoma cells without metabolic activation, and equivocal results were obtained with metabolic activations (NTP 1988). It did not induce unscheduled DNA synthesis in human lymphocytes in vitro (Perocco et. al., 1983), sister-chromated exchanges in Chinese hamster ovary cells with and without metabolic activation (NTP 1988), or mitotic aberration in rat lung cell cultures (Guern et al., 1971). All available animal mutagenicity studies have been negative.

Cytogenetic studies with rat bone marrow cells and a dominant lethal study in CD-1 mice were negative in animals treated with para-dichlorobenzene (Anderson and Richardson, 1976; Anderson and Hodge, 1976). The lower exposure level of 75 ppm was a NOEL (EPA).

Based upon the results of the above studies and specifically the conclusions of the NTP report, EPA is proposing to amend the MCLG based upon reclassification of the overall evidence of carcinogenicity to the Group B2 Category (probable human carcinogen generally based on sufficient evidence in animals and adequate evidence in humans). Sufficient evidence of carcinogenicity from animal studies is defined as: “an increased evidence of malignant tumors or combined malignant and benign tumors: (a) In multiple species or strains; or (b) in multiple experiments (e.g., with different routes of administration or using different dose levels); or (c) to an unusual degree with regard to high incidence, unusual site or type of tumor, or early age at onset. Additional evidence may be provided by data on dose-response effects, as well as information from short-term tests or on chemical structure” (51 FR 33992, 33999). The NTP bioassay showed an increase in tumors in both rats and mice, which, together with the previous studies, could be sufficient for classification in Group B2, based upon positive evidence in multiple species.

However, consideration of the overall weight of the evidence could also suggest the alternative view that p-dichlorobenzene should be classified in Group C with respect to oral exposure. Classification in Group C is generally based on limited evidence of oncogenic potential in animal studies without accompanying human evidence. Support for placing p-dichlorobenzene in Group C derives from:

(a) The uncertainties associated with the extrapolation of findings from studies in which the agent was administered by gavage in corn oil to the human exposure situation;

(b) The concern that the non-neoplastic histopathology present in both the rat and mouse strains might be associated with the neoplastic process and are not apt to be seen at current human exposures;

(c) An alternative interpretation of the Agency’s cancer risk assessment guidelines which would diminish the significance of the finding of tumors in the mouse liver from “sufficient” to “limited”;

(d) A concern that the maximum tolerated doses (MTDs) in the new NTP study may have been exceeded in one or more dose groups which would confound the observations; and

(e) The total weight of evidence from the NTP and earlier animal studies coupled with the short-term test results.

The EPA is, therefore, requesting comments on the total weight of evidence from the results of all of the p-dichlorobenzene studies. If the Agency determines that p-dichlorobenzene is a Group C substance as defined in the Agency’s carcinogenicity classification guidelines, then the proposed MCLGs would be calculated as follows:

\[
\text{MCLG} = \frac{\text{Rfd} \times \text{drinking water contribution}}{\text{MCLG} = \frac{3.75 \text{mg/L} \times 0.20}{\text{Additional uncertainty factor}}} \\
\text{MCLG} = \frac{0.75 \text{mg/L}}{10}
\]

EPA has tentatively calculated excess cancer risk rates for p-dichlorobenzene in a “what if” calculation based upon
the liver tumor data in male mice from the NTP bioassay (EPA d). These projections used in the linearized multistage model and associate a drinking water concentration of approximately 2 \( \mu g/1 \) with an upperbound excess lifetime cancer risk of \( \times 10^{-6} \) at the 95 percent confidence interval for para-dichlorobenzene. These are draft calculations and may be revised in the future.

As discussed above and in the November 1985 Federal Register notice, EPA considers compounds ranked in Group A, B1, or B2 to be known or probable human carcinogens (Category I in the three-category approach for setting MCLGs) and sets the MCLGs for these compounds at zero. EPA is proposing that the MCLG be amended to zero based upon para-dichlorobenzene being classified in Group B2. Public comments are requested on this proposal as well as on classifying para-dichlorobenzene in Group C. If Group C is determined to be appropriate, the MCLG would be set at 0.75 mg/l. The final determination will be in the final rule.

IV Reproposed MCL for Para-Dichlorobenzene

As described above, MCLs are enforceable standards under the SDWA. EPA is to set each MCL as close to the MCLG as feasible with the use of the best available technology (taking cost into consideration). An MCL is to be established if it is economically and technologically feasible to ascertain the concentration of the contaminant in public water systems; otherwise, EPA is to require the use of a treatment technique.

The general approach to setting MCLs is to determine the feasibility of controlling a contaminant using various technologies to determine which are "best." This requires an evaluation of: (1) The availability and performance of various technologies for removing the contaminant; (2) the costs of the application of each technology and (3) the availability and cost of analytical methods. Other factors that may be appropriate for examination include total costs of control and theoretical risks associated with various levels of control.

In determining whether technologies are economically available EPA considers whether they are reasonably affordable by regional and large metropolitan public water systems. This standard was established when the Safe Drinking Water Act was enacted in 1974 [see H.R. Rep. No. 93-1185, p. 18 (1974)] and reaffirmed when the Act was amended [see 132 Cong. Rec. S6287 (May 21, 1986)]. Technologies are also judged to be "best" based on the following factors: wide applicability, removal efficiency, cost effectiveness, high degree of compatibility with other water treatment processes, and the ability to achieve compliance for all water in a public water system.

In its November 1985 notice, EPA proposed an MCL equal to the MCLG (i.e., 0.75 mg/l) for para-dichlorobenzene because the level was achievable by the best available technology and the level could be measured within specified limits of precision and accuracy.

A. Technologies

In the November 1985 notice, EPA proposed packed tower aeration (PTA) and granular activated carbon (GAC) adsorption as the best technologies generally available (BTGA) for removing para-dichlorobenzene (and the other VOCs) from drinking water. In today's notice, EPA is proposing these same technologies as the "best available technologies" (BAT) that replaced BTGA under the SDWA Amendments (EPA b). As explained above, the SDWA requires that each national primary drinking water regulation specify an MCL which is as close to the MCLG as feasible. The term "feasible" means feasible with the use of the best technology, treatment techniques, and other means which the Administrator finds, are available. These technologies and techniques must be examined for efficacy under field conditions and not merely under laboratory conditions, and cost must be considered. Section 1412(b)(5) of the Act specifically states that GAC technology is feasible for the control of synthetic organic chemicals. In addition, any technology, treatment technique, or other means found to be the "best available" for the control of synthetic organic chemicals must be at least as effective in controlling synthetic organic chemicals as GAC.

The 1986 amendments to the Act changed the requirement that "feasibility" in setting an MCL be based on best technology generally available (BTGA), considering cost, to that based on best available technology (BAT), considering cost. In addition, the technology selected must be tested for efficacy under field conditions, not just under laboratory conditions. The legislative history explains that the term "generally" was removed to assure that MCLs reflect the full extent of current technology capability [see 99-56, 99th Cong., 1st Sess., at 6 (1985)]. Read together with the legislative history, EPA has concluded that "best available technology" represents a broader standard, than "BTGA" allowing EPA to select a technology that is not necessarily in widespread use, as long as it has been field-tested beyond the laboratory. (See also the discussion of best available technology for variances, below.)

EPA has determined that PTA and GAC adsorption meet the engineering criteria for BAT and are "best" for the reasons discussed in the November 1985 notice. In summary, these technologies are commercially available and have been successfully applied or demonstrated for the removal of other VOCs from ground water with similar removal efficiencies in many plants in the U.S. PTA can achieve a high level (90-99 percent or more) of VOC removal including p-dichlorobenzene, from ground water under all anticipated conditions and is at least as effective for removal of VOCs as GAC. GAC can also achieve a high level of removal (up to 99 percent) for p-dichlorobenzene in ground water. GAC has been applied or demonstrated for a number of VOCs, and has been extensively studied. p-Dichlorobenzene was studied by WERL-ORD and was found to be very similar to the other VOCs in respect to GAC removal efficiencies. These studies are written up in the document.

"Technologies and Costs for the Removal of Volatile Organic Chemicals from Potable Water Supplies" [See EPA b, "Technologies and Costs for Removal of VOCs from Potable Water Supplies" (May 1985)] The Agency has not identified a more effective technology to remove p-dichlorobenzene from ground water.

B. Costs

The costs for removal (1983 dollars) of p-dichlorobenzene have been estimated for both PTA and GAC; costs for up to 99 percent removal [from 0.5 mg/l to 0.005 mg/l] for granular activated carbon range from 74-154/$1,000 gallons for large to medium systems and are approximately 58/1,000 gallons for small systems. For packed tower aeration, costs are approximately 54-84/$1,000 gallons for large to medium systems and 57/$1,000 gallons for small systems. EPA considers these costs to be reasonable (EPA c).

C. Analytical Methods

In the November 1985 notice, the Agency determined that three analytical methods, Methods 502.1, 503.1 and 524.1 are "economically and technologically feasible" for monitoring compliance with the MCLs for VOCs (including p-dichlorobenzene). In this notice, the Agency is requesting comment on the
economic and technical feasibility of two capillary column analytical techniques for removal of VOCs (including p-dichlorobenzene) from drinking water. These techniques are:

(1) Method 524.2, "Volatile Organic Compounds in Water by Purge and Trap, Capillary Column Gas Chromatography/Mass Spectrometry"


The Agency has estimated method detection limits (MDLs), the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the true value is greater than zero, and practical quantitation levels (PQLs), the lowest level reliably achievable by the best laboratories within specified limits during routine laboratory operating conditions. The PQLs are based on a general rule that 5 to 10 times the MDL is a range of reliable operation; the results of inter-laboratory studies are used to confirm this general rule when available. For p-dichlorobenzene and the other VOCs, EPA determined that the MDL ranges from 0.0002 to 0.0005 mg/l. EPA estimated PQLs for the VOCs based on their MDLs. The PQL is a value which represents a practical and routinely achievable reliable measurement. EPA proposed setting PQLs 5 to 10 times the MDL in the November 1985 notice. In that notice, EPA reported the results of inter-laboratory studies confirming this estimate and determined PQLs for each substance. The PQLs based on these laboratory data are considered a "two-step removed" surrogate for laboratory performance and therefore are considered a conservative estimate of laboratory performance. Limitations in the data used for PQLs include the following: 1) performance evaluation samples are sent to the laboratories in which a limited number of concentrations are analyzed and the samples do not have matrix interferences as actual samples could, 2) PQLs are set based on EPA and State laboratory data which are considered to be representative of the best laboratories, (i.e., not all laboratories), and 3) samples are analyzed under controlled testing conditions which are not representative of routine performance. Thus, the PQLs represent a stringent target for performance for laboratories to achieve.

The inter-laboratory data available prior to the November 1985 notice demonstrated that the number of laboratories producing less accurate data generally increases as the concentration decreases. For the VOCs, the data suggested that 0.005 mg/l would be achievable by most laboratories within ±60 percent. A value of ±60 percent was considered appropriate based upon the desire to set the smallest interval on precision and accuracy (i.e., ± some percentage) that could be achieved by the majority of the best laboratories. A limit of ±20 percent would have been more desirable, resulting in a higher standard of performance but, at the time of proposal of the MCLs for the VOCs, the data showed that much smaller percentage of laboratories would have been able to achieve that level. At that time, a PQL of 0.005 mg/l, which is in the range of 5 to 10 times the MDL, was considered reasonable for the VOCs.

New performance evaluation studies for determining the PQLs have become available for VOCs since publication of the November 1985 notice. On May 27, 1986, EPA published these data in the Federal Register for public comment (51 FR 19076). For p-dichlorobenzene, these data, in addition to data previously published in the November 1985 notice (p. 46907), indicate that a PQL of 0.005 mg/l is appropriate. At this concentration level, EPA estimates that approximately three-fourths of the best laboratories can provide data within ±20 percent of the true value under the conditions of the evaluation. This PQL is in the range of 5 to 10 times the MDL and thus confirms the general rule discussed above. An acceptance range of precision/accuracy limits of ±20 percent was used, rather than ±40 percent as was used in the November 1985 proposal, since the data indicate that there has been some improvement in laboratory performance.

D. Determination of the MCL

In selecting an appropriate MCL for p-dichlorobenzene, EPA considered a range of pertinent factors. These factors include the availability and performance of treatment technologies, costs of meeting MCLs, and the availability and capability of analytical methods; EPA also examined health risks to determine what the risk would be at various levels. EPA is reproposing the MCL for p-dichlorobenzene at 0.005 mg/l based on the following factors:

- BAT (GAC and PTA) can remove p-dichlorobenzene down to 0.005 mg/l at low incremental costs. These technologies have removal efficiencies of 90-99 percent and are already being used successful in ground water by public water systems in the U.S.
- The costs for removal (in large to medium systems) are approximately $8/e/1.000 gallons for aeration and 7¢ to 15¢/1.000 gallons for GAC.
- Analytical methods are available and the PQL is 0.005 mg/l with precision/accuracy limits of ±20 percent.
- Total compliance costs are minimal since p-dichlorobenzene is expected to be found in very few water supplies at levels above 0.005 mg/l and it is removed by the same technologies that are used to remove other volatile contaminants.
- The draft theoretical upper bound lifetime risk using the conservative linear nontreshold model (upper 95 percent confidence interval) is between 10-6 to 0.005 mg/l.

The Agency believes that, given all these factors, 0.005 mg/l is as close to the MCLG as is feasible, as required by Section 1412 (b)(5) of the Act. However, if the Agency, after public comment, classifies p-dichlorobenzene as a Group C substance and sets the MCLG at 0.075 mg/l, the MCL will also be set at 0.075 mg/l. Given the BAT removal capabilities, costs and performances of the available analytical methods, it would be "feasible" to set the MCL at the same level at the MCLG.

V Technology and Compliance for Variances and Exemptions

Section 1415(a)(1)(A) of the Act, as amended, requires EPA to promulgate its determination of the best available technology for purposes of granting a variance. As with the technology selected as the basis for the MCL, Congress deleted the requirement that this technology be "generally" available. In the November 1985 notice, EPA proposed that packed tower aeration and granular activated carbon were best technologies generally available for the VOCs (including p-dichlorobenzene) under Section 1415. The Agency is proposing that packed tower aeration and granular activated carbons are also BAT under Section 1415 for p-dichlorobenzene, at the reproposed MCL of 0.005 mg/l. These technologies are proposed at BAT for systems of all sizes since they are commercially available and effective in ground water for any size system, both from a design and an operational perspective. EPA acknowledges that the costs may be relatively higher for small systems for VOCs removal; however, EPA feels that the costs are reasonable. For p-dichlorobenzene, EPA expects that no system would need to install treatment to meet the proposed MCL of 0.005 mg/l. EPA will reexamine the issue of costs for small systems in the final rule for p-dichlorobenzene and the other VOCs.
The primacy agent may grant a variance only if it determines that the variance will not result in an unreasonable risk to health. The Agency will provide guidance on what constitutes an unreasonable risk to health prior to the effective date of this regulation.

Under Section 1415(a)(1)(A), if a primacy agent grants a variance, it must prescribe a schedule for compliance and implementation of any necessary control measures for the duration of the variance. In today's notice, the Agency is proposing that primary agents be allowed to require point-of-use (POU) devices or bottled water as a condition of obtaining a variance from an MCL for any VOC as follows. The conceptual process would be as follows:

Public water systems would have to apply best available technology, treatment techniques, or other means available (BAT), as designated under Section 1415. Included, packed tower aeration, granular activated carbon.

If the MCL could not be achieved, then the primacy agent could grant a variance provided that the variance would not result in an unreasonable risk to health (URTH). (EPA will specify the URTH level for each regulated contaminant, including VOCs.)

In the case of a system in which the VOC level exceeds the URTH level, the primacy agent will be required to impose additional control measures in the interim until full compliance is reached. The primacy agent must determine that the control levels will ensure that the URTH level is not exceeded, before it can grant a variance from the NPDES. EPA is proposing to allow these measures to include POU devices and bottled water.

Section 1416(b)(1)(B) of the Act directs the primacy agent to prescribe any necessary control measures when it grants an exemption. The primacy agent must determine that there will be no unreasonable risk to health if it grants the exemption. This notice proposes, just as for variances, that POU devices and bottled water can be required as conditions for obtaining exemptions, as described in the last bullet above.

EPA feels that provision of central treatment could be the primary means of attaining MCLs. Although the long term goal for these systems is still to meet MCLs with centrally treated and distributed water, requiring POU or bottled water as a condition of receiving a variance or an exemption would provide an interim source of water that meets the MCLs, while the system brings its water supply into compliance. This is especially important in the case of exemptions for small systems, i.e., systems with less than 500 connections, because their exemptions may be extended for one or more two-year periods, perhaps indefinitely.

EPA is proposing the following conditions on the use of bottled water for variances and exemptions.

1) A monitoring program is in place that provides reasonable assurances that bottled water meets all MCLs. Specifically, the public water system must monitor a representative sample of the bottled water for VOCs the first quarter that it supplies water to the public and annually after the initial sample. The public water system may not supply bottled water which exceeds any of the EPA's MCLs as set out in 40 CFR 141 or FDA's quality measures as set out in 21 CFR 103. Results of the monitoring program shall be provided to the primacy agent, annually.

The public water system must receive from the bottled water company certification that 1) the water is from an "approved source" as defined in 21 CFR 129.5, 2) all bottled water supplied to the public water system has been monitored as required in 21 CFR 129.80 and found to meet all of the MCLs as well as the FDA quality measures as set out in 31 CFR 103. The public water system shall provide the certification to the primacy agent the first quarter that it supplies bottled water and annually thereafter.

2) The public water system is fully responsible for the provision of sufficient quantities of bottled water to every person supplied by the public water system, via a door-to-door bottled water delivered system.

EPA believes these conditions are the minimum necessary to assure adequate drinking water quality while variances and exemptions from NPDESs for VOCs are in place. For the same reason, EPA is proposing to impose certain conditions on point-of-use devices that are installed as a condition of receiving a variance or exemption. These conditions are similar to those proposed in the November 13, 1985 VOC proposal as 40 CFR 141.89(a)-(f) See 50 FR 46930.

The conditions are as follows:

1) It is the responsibility of the public water system to operate and maintain the point-of-use treatment system.

2) The utility must develop a plan and obtain primacy agent approval for a monitoring scheme before point-of-use devices are installed for compliance. This monitoring scheme must provide health protection equivalent to a monitoring scheme for central water treatment.

3) Effective technology must be properly applied under a plan approved by the primacy agent and the microbiological safety of the water must be maintained.

4) The primacy agent must require adequate certification of performance field testing, and a rigorous engineering design review of the point-of-use devices proposed.

5) The design and application of the proposed point-of-use devices must consider the tendency for increase in heterotrophic bacteria concentrations in water treated with activated carbon. It may be necessary to use frequent backwashing, post-contractor disinfection, and Heterotrophic Plate Count monitoring to ensure that the microbiological safety of the water is not compromised.

All consumers shall be protected. Every building connected to the system must have the point-of-use device installed, maintained, and adequately monitored. The primacy agent must be assured that every building is covered by treatment and monitoring, and that the rights and responsibilities of the utility customer convey with title upon sale of property.

EPA recognizes that there are certain inconsistencies in the codification (i.e., the numbering scheme) for various regulations that would apply to the VOC rule. Consequently, EPA is proposing the following requirements for p-dichlorobenzene. Compliance monitoring requirements for p-dichlorobenzene will be included along with the final VOC rules scheduled for completion later in 1987.

VI. Compliance Monitoring Requirements

EPA proposed compliance monitoring requirements for the VOCs in the November 1985 notice. These same compliance monitoring requirements would apply to the MCL proposed today. Consequently, EPA is not reproposing the monitoring requirements for p-dichlorobenzene. Compliance monitoring requirements for p-dichlorobenzene will be included along with the final VOC rules scheduled for completion later in 1987.

VII. Public Notice Requirements

EPA will propose to amend the current public notification requirements in order to incorporate new statutory requirements imposed by the 1986 Amendments [Section 1414(c)] this month. According to the proposal, notices of violation of the MCL for a contaminant, as well as certain notices regarding variances and exemptions, must include specified language on the toxicological effects of contaminant. In that notice, EPA will propose specific language for public notices for violations of the p-dichlorobenzene MCL.

VIII. Economic Impact Assessment

An economic impact assessment was prepared as background for the November 1985 notice and is entitled "Economic Impact Analysis of Proposed Regulations to Control Volatile
Synthetic Organic Chemicals (VOCs) in Drinking Water.” The report presented estimates of the benefits and costs of regulatory alternatives for all the VOCs, including p-dichlorobenzene.

As mentioned earlier, p-dichlorobenzene has been detected in both ground and surface drinking water systems in a small number of cases at levels above a method detection level of 0.0005 mg/l. Based on random samples of ground and surface water systems, it is estimated that 200 to 800 ground and 30 to 40 surface water systems have detectable levels of p-dichlorobenzene. However, the data indicate that p-dichlorobenzene is found only at very low concentrations; no surface or ground water systems are expected to have the chemical present in their waters consistently at levels greater than 0.005 mg/l. For this reason, the reproposed MCL will have virtually no economic impact. In addition, since p-dichlorobenzene is detected at the same time that other volatile organic contaminants are analyzed, there would be no incremental cost of complying with the MCL for p-dichlorobenzene in addition to the MCLs proposed for the other volatile organic contaminants (see the November 1985 notice).

IX. Other Statutory Requirements

A. Executive Order 12291

Under Executive Order 12291, EPA must judge whether a regulation is “major” and therefore subject to the requirements of a Regulatory Impact Analysis. This proposed action does not constitute a “major” regulatory action because it will not have a major financial or adverse impact on the regulated community. However, an Economic Impact Analysis was prepared during the regulation development and this regulation was submitted to the Office of Management and Budget for review.

B. Regulatory Flexibility Analysis

The Regulatory Flexibility Act requires EPA to explicitly consider the effect of proposed regulations on small entities. If there is a significant effect on a substantial number of small systems, means should be sought to minimize the effects.

Under the Regulatory Flexibility Act, 5 U.S.C. 601 et seq., I certify that this proposed rule will not have a significant effect on a substantial number of small entities. The Small Business Administration defines a small water-utility as one which serves fewer than 50,000 people. There are about 58,500 systems which for the purposes of this analysis are considered small systems.

Of course, this analysis under the Regulatory Flexibility Act is to portray the regulated community against other U.S. entities. In this regard, most public water systems are considered small. Of the 58,500 small systems, none are expected to have consistent contamination levels greater than the proposed MCL. This proposal would thus impact virtually none of the “small” systems.

C. Paperwork Reduction Act

The information collection requirements in this rule will be submitted for approval to the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 et seq. These requirements are not effective until approved by OMB.

X. References and Request for Public Comment

The following references for this rulemaking are included in the Public Docket. The Public Docket is available for viewing in Washington, DC, at the address listed at the beginning of this notice. All public comments received on the November 1985 proposal are included in the Docket.

EPA a U.S. Environmental Protection Agency, Criteria and Standards Division, Analytical Methods/Monitoring for VOCs in Drinking Water. (October, 1985)

EPA b U.S. Environmental Protection Agency, Criteria and Standards Division, Technologies and Costs for the Removal of Volatile Organic Chemicals from Potable Water Supplies. (May, 1985)


EPA d U.S. Environmental Protection Agency, Criteria and Standards Division, Criteria Document for ortho-Dichlorobenzene, meta-Dichlorobenzene and para-Dichlorobenzene. (February, 1987)

EPA f National Toxicology Program, Toxicology and Carcinogenesis Studies of 1,4-Dichlorobenzene in F344 Rats and B6C3F1 Mice (Gavage Studies). draft report, 1988.

EPA requests public comments and relevant information on all aspects of the proposed regulations. In particular, EPA requests comments on the following items:

- Do the new carcinogenicity data prepared by NTP modify the weight of evidence sufficiently to change the classification of p-dichlorobenzene from Group D to a Group B2 or a Group C substance?
- At what level should the MCL be set? Is the approach to setting the MCL appropriate?
- Are CAC and packed tower aeration BAT under Section 1412?
- Should BAT (for Section 1415 variances) vary with system size or water source (e.g., ground or surface) or other factors for p-dichlorobenzene? On what basis?

List of Subjects

40 CFR Part 141

Chemicals, Intergovernmental relations, Reporting and record-keeping requirements, Water supply.

40 CFR Part 142

Administrative practice and procedure; Chemicals, Radiation protection, Requirements, Intergovernmental relations, and Water supply.


Lee M. Thomas,

Administrator.

For the reasons set out in the preamble, Title 40 of the Code of Federal Regulations is proposed to be amended as follows:

PART 141—NATIONAL PRIMARY DRINKING WATER REGULATIONS

1. The authority citation for Part 141 is revised to read as follows:

Authority: 42 U.S.C. 300g-1, 300g-3, 300g-6, 300j-4, and 300j-8.

2. In §141.2, paragraph (x) is added to read as follows:

§141.2 Definitions

- * * * *

(x) "Best available technology" or “BAT” means the best technology, treatment techniques, or other means which the Administrator finds, after examination for efficacy under field conditions and not solely under laboratory conditions, are available for achieving the MCL set in each NPDES permit (taking cost into consideration). For the purposes of achieving the MCL for synthetic organic chemicals, any BAT must be at least as effective as granular activated carbon.
3. Section 141.50 is amended by adding paragraph (a)(6), to read as follows and removing paragraph (b)(3).

§ 141.50 Maximum contaminant level goals for organic contaminants.
(a) * * *
4. In § 141.61, (as proposed at 50 FR 46930, Nov. 13, 1985) paragraph (a)(8) is revised to read as follows:

§ 141.61 Maximum contaminant levels for organic compounds.
(a) * * *

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Maximum contaminant level in mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>(f) para-dichlorobenzene</td>
<td>0.005</td>
</tr>
</tbody>
</table>

5. Section 141.63 is added to read as follows:

§ 141.63 Best available technology for volatile organic chemicals.

The Administrator, pursuant to Section 142(b)(6) of the Act, hereby identifies the following as BAT for achieving the maximum contaminant level for para-Dichlorobenzene (§ 141.61 (a)(8)): Removal using packed tower aeration; removal using granular activated carbon.

PART 142—NATIONAL INTERIM PRIMARY DRINKING WATER REGULATIONS IMPLEMENTATION

1. The authority citation for Part 142 (as proposed at 50 FR 46930, Nov. 13, 1985) continues to read as follows:

Authority: 42 U.S.C. 300g-2, 300g-3, 300g-4, 300g-5, 300g-6, and 300g-9.

2. Section 142.61 (as proposed at 50 FR 46931, Nov. 13, 1985) is proposed to be amended by revising paragraph (e) and adding new paragraphs (f) and (g) to read as follows:

§ 142.61 Variances from the maximum contaminant level for volatile organic chemicals.

(e) The primacy agent may require a public water system to use bottled water or point-of-use devices as a condition of granting a variance from NPDWRs for volatile organic chemicals.

(f) Public water systems that use bottled water as a condition for receiving a variance from NPDWRs for volatile organic chemicals must meet the following requirements:
1. The primacy agent must require and approve a monitoring program for bottled water. The public water system must develop and put in place a monitoring program that provides reasonable assurances that the bottled water meets all MCLs. The public water system must monitor a representative sample of the bottled water for all regulated VOCs the first quarter that it supplies water to the public, and annually thereafter. Results of the monitoring program shall be provided to the primacy agent, annually. Or, the public water system must receive a certification from the bottled water company that (i) The bottled water supplied has been taken from an "approved source" as defined in 21 CFR 129.3(a), (ii) the bottled water company has conducted monitoring in accordance with 21 CFR 129.30(g)(1)-(3), and (iii) the bottled water does not exceed the MCLs or quality limits as set out in 21 CFR 103.35.

2. The public water system must be fully responsible for the provision of sufficient quantities of bottled water to every person supplied by the public water system, via door-to-door bottled water delivery.

(g) Public water systems that use point-of-use devices as a condition for obtaining a variance must meet the following requirements:
1. It is the responsibility of the public water system to operate and maintain the point-of-use treatment system.
2. The utility must develop a plan and obtain primacy agent approval for a monitoring scheme before point-of-use devices are installed for compliance. This monitoring scheme must provide health protection equivalent to a monitoring scheme for central water treatment.
3. Effective technology must be properly applied under a plan approved by the primacy agent and the microbiological safety of the water must be maintained.

4. The primacy agent must require adequate certification of performance field testing, and a rigorous engineering design review of the point-of-use devices proposed.

5. The design and application of the proposed point-of-use devices must consider the tendency for increase in heterotrophic bacteria concentrations in water treated with activated carbon. It may be necessary to use frequent backwashing, post-contractor disinfection, and heterotrophic Plate Count monitoring to ensure that the microbiological safety of the water is not compromised.

6. All consumers shall be protected. Every building connected to the system must have the point-of-use device installed, maintained, and adequately monitored. The primacy agent must be assured that every building is covered by treatment and monitoring, and that the rights and responsibilities of the utility customer convey with title upon sale of property.

3. A new Subpart H is proposed to be added to Part 142 of Title 40 to read as follows:

Subpart H—Conditions for Obtaining Exemptions

§ 142.70 Bottled water and point of use devices.

(a) The primacy agent may require a public water system to use bottled water or point-of-use devices as a condition for contaminants when using the system's water would create an unreasonable risk to health.

(b) Public water systems that use bottled water as a condition for receiving an exemption from NPDWRs for volatile organic chemicals must meet the requirements set out in § 142.61(f) of this part.

(c) Public water systems that use point-of-use devices as a condition for receiving an exemption from NPDWRs for volatile organic chemicals must meet the requirements set out in § 142.61(g) of this part.

[FR Doc. 87-871 Filed 4-16-87; 8:45 am]
Part V

Department of the Interior

Office of the Secretary

43 CFR Part 11
Natural Resource Damage Assessments; Proposed Rule
DEPARTMENT OF THE INTERIOR
Office of the Secretary
43 CFR Part 11

Natural Resource Damage Assessments

AGENCY: Department of the Interior.

ACTION: Proposed rule.

SUMMARY: This proposed rule provides amendments to the final natural resource damage assessment regulations to be codified at 43 CFR Part 11. The natural resource damage assessment regulations establish procedures for assessing damages to natural resources resulting from a discharge of oil or a release of a hazardous substance, and compensable under either the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, also known as Superfund, or under the Clean Water Act (CWA). The regulations contain procedures for two types of assessments: standard, simplified "type A" procedures; and alternative "type B" procedures to be used in individual cases. The final regulations were published in two segments, the rule published on August 1, 1986 (51 FR 27674), contained the general assessment process, applicable to both types of assessments, and the type B procedures. The rule published on March 20, 1987 (52 FR 9042), contained type A procedures.

The natural resource damage assessment regulations are provided for the use of authorized Federal and State officials referred to in CERCLA as "trustees" for natural resources. These procedures will assist authorized officials to perform natural resource damage assessments for use in court actions or administrative proceedings when seeking compensation for injures to natural resources.

This proposed rule is necessitated by the Superfund Amendments and Reauthorization Act (SARA), passed by Congress and signed by the President on October 17, 1986. This proposed rule modifies the final regulations to conform with changes enacted by SARA that, among others: extend the rebuttable presumption to assessments performed by State trustees; provide for the recovery of prejudgment interest on damage awards; provide for a statute of limitations that revives certain past claims; require notification of trustees in cases of discharges or releases that might injure natural resources of concern to the trustee; create new responsibilities for Indian tribes; require Federal trustees to retain sums recovered, without further appropriations, for use only to restore, replace, or acquire the equivalent resources; and require State trustees to use sums recovered only to restore, replace, or acquire the equivalent resources.

DATES: Comments on this proposed rule should be submitted by May 18, 1987.

ADDRESS: Comments should be sent to David Rosenberger, CERCLA 301 Project, Room 4354, Department of the Interior, 1801 "C" St. NW, Washington, DC 20240. Comments will be available for review at the above address during regular business hours (7:45 a.m. to 4:15 p.m.) Monday through Friday.

FOR FURTHER INFORMATION CONTACT:
David Rosenberger (202) 343-1301
Linda Burlington (202) 343-1301
Willie Taylor (202) 343-7531
Alison Ling (415) 556-8807

SUPPLEMENTARY INFORMATION:
The contents of this preamble are listed in the following outline:

I. Introduction
II. Overview of Proposed Rule
A. Rebuttable Presumption
B. Definitions
C. Prejudgment Interest
D. Prohibition on Double Recovery
E. Statute of Limitations
F. Claims Against Assessed Fund
G. Notice to Trustees
H. Statutory Exclusions
I. Indian Tribes
J. Appropriations Process
K. Sixty-Day Notice
L. Use of Sums Recovered as Damages
M. Correction

I. Introduction

Pursuant to section 301(c) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. 9601 et seq., and Executive Order 12316, August 14, 1981 (46 FR 42237), the Department of the Interior (the Department) published final natural resource damage assessment regulations on August 1, 1986 (51 FR 27674), and March 20, 1987 (52 FR 9042). The regulations published at 51 FR 27674 contained procedures for the overall natural resource damage assessment process and specific procedures for conducting type B assessments in individual cases. The regulations published at 52 FR 9042 contained simplified procedures for conducting type A assessments in coastal and marine environments. Hereafter, these natural resource damage assessment rules are collectively referred to as the final rules, or rule. In the Superfund Amendments and Reauthorization Act of 1986 (SARA), Pub. L. 99-499, October 17, 1986, Congress made several revisions to sections of CERCLA directly relating to the final rules promulgated by the Department. In addition, Executive Order 12580 (52 FR 2923, January 23, 1987) redelegated the responsibility to promulgate the natural resource damage assessment regulations to the Department of the Interior. Today, the Department is proposing to amend the final rules to conform with the amendments to CERCLA enacted by the passage of SARA.

II. Overview of the Proposed Rule

A. Rebuttable Presumption

The final rule published on August 1, 1986, provided that the rebuttable presumption attached only to assessments performed by Federal officials (see §11.11 [51 FR 27726]). The Department, in the preamble to the rule, stated that it had adopted a position on this issue that was consistent with the Executive branch's prior interpretation of CERCLA in this matter (51 FR 27694, August 1, 1986).

Section 107[d][1] of SARA amended section 107[f] of CERCLA to add a new subsection (2)[C], which reads:

(C) REBUTTABLE PRESUMPTION—Any determination or assessment of damages to natural resources for the purposes of this Act and section 311 of the Federal Water Pollution Control Act made by a Federal or State trustee in accordance with the regulations promulgated under section 301(c) of this Act shall have the force and effect of a rebuttable presumption on behalf of the trustee in any administrative or judicial proceeding under this Act or section 311 of the Federal Water Pollution Control Act. (emphasis added.)

This SARA amendment specifically allows the rebuttable presumption to attach to natural resource damage assessments performed in accordance with the final rules to be codified at 43 CFR Part 11 to State trustees, as well as to Federal trustees. Section 111[c][2] of SARA deleted section 111[h], the section of CERCLA that had previously provided for the rebuttable presumption, and included the language providing for the rebuttable presumption in section 107[f][2][C] of CERCLA.

To implement this change, the Department proposes to amend the final rules to provide that State officials may receive the benefit of a rebuttable presumption for assessments they perform in accordance with the Natural Resource Damage Assessment Regulations, to be codified at 43 CFR Part 11. Therefore, amendments are proposed to §§11.10, 11.11, 11.14(ff), and
11.91(c) of the final rule to add the words "and State" to conform with the new section 107(f)(2)(C) of CERCLA. Also, the references in the final rule to section 111(h) of CERCLA have been revised to read, section 107(f)(2)(C) of CERCLA.

B. Definitions

SARA amended certain definitions contained in CERCLA. Because of these amendments, and the inclusion of a new definition for the term "Indian tribe," the Department is proposing to amend several definitions contained in § 11.14 of the final rule. Some of these changes are technical in nature, to conform with the new language added by SARA. The amendments to the definitions are as follows:

"Authorized official" Because of the new responsibilities of Indian tribes, the Department is proposing to amend its definition of "authorized official" to include a designated official of an Indian tribe as one who may, under the conditions of section 126(c) of CERCLA (see later discussion), perform a natural resource damage assessment.

"CERCLA" The Department is proposing to amend the definition of the term "CERCLA" to clarify that the term means CERCLA, as amended by SARA.

"Damage" The Department is proposing to amend the definition of the term "damages" to include amounts sought by an Indian tribe who may assert a claim.

"Fund" The Department is proposing to amend the definition of the term "Fund" to conform with the designation of the Fund as the "Hazardous Substance Superfund" found in section 517(c)(2) of SARA.

"Lead authorized official" The Department is proposing to amend the definition of "lead authorized official" to clarify that, under the conditions of section 126(d) of CERCLA, there are circumstances in which a designated official of an Indian tribe may act as lead authorized official.

"Natural resources" SARA amended the definition in CERCLA of the term "natural resources" to include resources of an Indian tribe. Therefore, the Department is proposing to amend the definition of the term "natural resources" in the final rule to include such resources.

"Rebuttable presumption" As discussed earlier in this preamble, SARA added a new section 107(f)(2)(C) to CERCLA to specifically provide that assessments performed in accordance with this rule by State trustees will be eligible to receive a rebuttable for assessments the States perform pursuant to the final rules. The Department is proposing to amend the definition of the term "rebuttable presumption" to conform with this new language of CERCLA.

"Trustee" SARA added a new section 107(f)(2)(A) and (B) to CERCLA to provide that:

1. DESIGNATION OF FEDERAL AND STATE OFFICIALS—
   (A) Federal.—The President shall designate in the National Contingency Plan published under section 105 of this Act the Federal officials who shall act on behalf of the public as trustees for natural resources under this Act and section 311 of the Federal Water Pollution Control Act. Such officials shall assess damages for injury to, destruction of, or loss of natural resources for purposes of this Act and such section 311 for those resources under their trusteeship and may, upon request of and reimbursement from a State and at the Federal officials' discretion, assess damages for those natural resources under the State's trusteeship.
   (B) State.—The Governor of each State shall designate State officials who may act on behalf of the public as trustees for natural resources under this Act and such section 311 of the Federal Water Pollution Control Act and shall notify the President of such designations. Such State officials shall assess damages to natural resources for the purposes of this Act and such section 311 for those natural resources under their trusteeship.

This new language replaced the previous language found in section 111(h)(1) of CERCLA, which was deleted by SARA. The new language was then placed in section 107(f)(2)(A) and (B).

The Department proposes to amend the final rule and to the CERCLA remedial action program: For that reason, the Department proposes to amend the final rule to include a recognition of the new statute of limitations.

Under the original CERCLA, section 112(d) provided that a claim for damages must be commenced within three years from the date of the discovery of the loss or December 11, 1980, whichever is later. In SARA, the statute of limitations for claims against the Fund and actions for natural resource damages were treated in separate sections. Section 112(c) of SARA relating to claims against the Fund amended section 112(d) of CERCLA to provide in part that:

No claim may be presented under this section for recovery of the damages referred to in section 107(a) unless the claim is presented within 3 years after the later of the following:

(A) The date of the discovery of the loss and its connection with the release in question.
(B) The date on which final regulations are promulgated under section 301(c).

Section 113(b) of SARA amended section 112 of CERCLA to add a new section 112(g)(1) relating to actions for natural resource damages:

Except as provided in paragraphs (3) and (4), no action may be commenced for...
damages (as defined in section 101(19)) under this Act, unless that action is commenced within 3 years after the later of the following:

(A) The date of the discovery of the loss and its connection with the release in question.

(B) The date on which regulations are promulgated under section 301(c).

With respect to any facility listed on the National Priorities List (NPL), any Federal facility identified under section 120 (relating to Federal facilities), or any vessel or facility at which a remedial action under this Act is otherwise scheduled, an action for damages under this Act must be commenced within 3 years after the completion of the remedial action (excluding operation and maintenance activities) in lieu of the dates referred to in subparagraph (A) or (B). In no event may an action for damages under this Act with respect to such a vessel or facility be commenced (i) prior to 90 days after the Federal or State natural resource trustee provides to the President and the potentially responsible party a notice of intent to file suit, or (ii) before selection of the remedial action if the President is diligently proceeding with a remedial investigation and feasibility study under section 104(b) or section 120 (relating to Federal facilities). The limitation in the preceding sentence on commencing an action before giving notice or before selection of the remedial action does not apply to actions filed on or before the enactment of the Superfund Amendments and Reauthorization Act of 1986.

The Conference Report states that:

This section requires that civil actions for damages to natural resources generally be delayed until completion of the RI/FS at NPL sites and at certain other sites where the President is diligently proceeding with the RI/FS. The phrase "the President is diligently proceeding with a remedial investigation and feasibility study" includes cases where a potentially responsible party is performing an RI/FS under direction of the President.

The Conference has adopted these amendments relating to the time limits for initiating for natural resource damages because the ability for Federal and State trustees to pursue such claims and actions has been impaired by the failure of the President to promulgate regulations governing (sic) procedures for filing claims and assessing damages to natural resources.

These amendments are intended to revive the causes of actions for natural resource damages that may have been foreclosed by the running of the statute of limitations relating to such actions under current law. A corresponding set of amendments in section 112 pertaining to the time limit for filing claims against the fund for natural resource damages is also intended to revive claims that may have been foreclosed.


It is proposed to amend § 11.15 by adding a new subsection (d) providing that actions are to be commenced in accordance with the statute of limitations set forth in section 113 of CERCLA.

That statutory amendment embodies in the law itself the guidance contained in § 11.84(c) of the final rule that the determination of damages shall account for the effects of response actions. In most cases now, natural resource damage claims must wait until remedial actions are completed or at least until a remedy is selected.

F Claims Against the Fund

The final rule does not include procedures for the filing of claims against the Hazardous Substance Superfund (Fund). Rules for that purpose have been promulgated by the Environmental Protection Agency (EPA), at 40 CFR Part 306. Section 517 of SARA expressly deleted expenditures for natural resource damages and assessment costs from the Fund. However, the language authorizing such claims was retained and amended by Section 111 of SARA. The Department will amend its rule in the future in accordance with any action EPA may take with regard to its Natural Resource Claims Procedures, published at 40 CFR Part 306.

G. Notice to Trustees

Section 11.20 of the final rule includes a reference to §§ 300.52(d) and 300.64(d) of the National Oil and Hazardous Substances Contingency Plan (NCP) that provide for the On Scene Coordinator (OSC) or lead agency to notify the agency acting as trustee when natural resources have been or are likely to be injured by a discharge of oil or a release of a hazardous substance being investigated under the NCP. In the reauthorization of CERCLA, a notification and coordination requirement was included in the language of CERCLA itself, making it a statutory requirement. The Department notes that EPA is currently revising the NCP to include coordination between Federal and State trustees and Indian tribes. Section 11.20(a) of the final rule is proposed to be amended to include the new statutory requirement, and to specify that trustees should respond, as appropriate, and provide necessary coordination in a timely manner.

H. Statutory Exclusions

Section 107(f) of CERCLA originally contained several exclusions to liability. These exclusions included that no liability to the United States or a State shall be imposed where it has been demonstrated that the damages for injuries to natural resources were foreseeable and any reasonable commitment of natural resources in an environmental impact statement, or other comparable environment analysis, and the decision to grant a permit or license authorizes such commitment of natural resources, and the facility or project was otherwise operating within the terms of its permit or license. Section 107(f) was amended by SARA to extend this exclusion to liability for natural resource damages to an Indian tribe, "so long as, the damages to an Indian tribe occurred pursuant to a Federal permit or license, and the issuance of that permit or license was not inconsistent with the fiduciary duty of the United States with respect to such Indian tribe." Also, section 114(a) of SARA amended section 114(c) of CERCLA to preclude recovery of response costs or damages resulting from a release or threatened release of recycled oil from service station dealers who are not owners or operators of vessels or hazardous waste disposal facilities, under certain conditions. Because of these two additional statutory exclusions from liability, the Department proposes to amend §§ 11.24 and 11.71 to include these provisions in the damages that are excluded from liability under CERCLA.

I. Indian Tribes

SARA amended CERCLA to provide for the role of Indian tribes in the natural resource damage provisions. As stated earlier in this preamble, the definition of natural resources found at section 101(16) of CERCLA was amended by SARA to include resources "belonging to, managed by, held in trust by, appertaining to, or otherwise controlled by any Indian tribe, or if such resources are subject to a trust restriction on alienation, any member of an Indian tribe." SARA also added Indian tribes in section 107(a)(4)(A), which establishes the liability of responsible parties for Federal or State costs of removal or remedial action. Section 107(f) of CERCLA was amended to provide that liability for damages for injury to, destruction of, or loss of natural resources, including the reasonable costs of assessing such injury, destruction, or loss resulting from such action, would also be "to any Indian tribe for natural resources belonging to, managed by, controlled by, or appertaining to such tribe, or held in trust for the benefit of such tribe, or belonging to a member of such tribe if such resources are subject to a trust restriction on alienation."

Other amendments to CERCLA relating to the role of Indian tribes include: to amend section 111(b)(1) to include Indian tribes as those who may assert claims against the Fund for injury to, or destruction or loss of natural resources; to amend section 111(c)(2) to
include Indian tribes as among those who may recover from the Fund for the costs of restoration, rehabilitation, or replacement or acquiring the equivalent of any natural resources injured, destroyed, or lost as a result of a release of a hazardous substance; and to include Indian tribes in the section 111(i) requirement for Restoration Plans. The Department is proposing amendments to pertinent sections of the final rule to bring the rule into conformance with these amendments to CERCLA.

Section 220 of SARA added a new section 128 to CERCLA to provide in part, that:

(a) Treatment Generally.—The governing body of an Indian Tribe shall be afforded substantially the same treatment as a State with respect to the provisions of section 103(a) (notifying the release of releases), section 104(c)(2) (consultation on remedial action), section 104(e) (access to information), section 104(j) (regarding health authorities) and section 105 (regarding roles and responsibilities under the national contingency plan and submittal of priorities for remedial action), but not including the provision regarding the inclusion of at least one facility per State on the National Priorities List.

(b) Limitation.—Notwithstanding any other provision of this Act, no action under this Act by an Indian Tribe shall be barred until the later of the following:

(1) the applicable period of limitations has expired.
(2) 2 years after the United States, in its capacity as trustee for the tribe, gives written notice to the governing body of the tribe that it will not present a claim or commence an action on behalf of the tribe or fails to present a claim or commence an action within the time limitations specified in this Act.

Because of the language of this new section 128 of CERCLA, the Department proposes to amend its final rule to give Indian tribes substantially the same treatment as that given to the States, in accordance with the intent of Congress, as discussed earlier in this preamble. The changes to the rule provide that, under certain circumstances, an Indian tribe may perform an assessment and bring a claim for damages determined by the assessment, however, as discussed below, CERCLA does not provide the rebuttable presumption to assessments performed by Indian Tribes.

The SARA amendments to section 107(f) of CERCLA do not grant the rebuttable presumption to assessments performed by Indian tribes. Also, section 128 of CERCLA, which specifies that the governing body of an Indian tribe shall be afforded substantially the same treatment as a State, under certain circumstances, with respect to certain provisions of CERCLA, does not list the provisions of section 107(f) of CERCLA as among those provisions available to Indian tribes. Furthermore, no amendments by SARA in either section 113(h), which previous to SARA provided for the rebuttable presumption, or in section 107(f)(2)(C) of CERCLA, which now grants the rebuttable presumption to Federal and State trustees, contain any language extending the rebuttable presumption to Indian tribes. Therefore, from the language of the statute, the Department does not have the authority to grant the rebuttable presumption to Indian tribes within this proposed rule. The Department points out that, of course, if a Federal official, acting as trustee on behalf of an Indian tribe, performs the assessment of damages, that assessment of damages by the Federal official will be accorded the rebuttable presumption, as provided in section 107(f)(2)(C) of CERCLA.

J. Appropriations Process

Section 11.82(d)(2)(iv)(B) of the final rule provides that:

(b) If the acquisition of land for Federal management constitutes the only viable method of obtaining the lost services, the appropriation process must be included in the scheduling of such acquisition since funding for such acquisition will have to be obtained through appropriations.

Also, § 11.92(b) of the final rule provides that:

(b) Land acquisition. Any monies awarded for the purpose of acquiring land for Federal management shall be deposited in the general fund of the United States Treasury. Federal agencies shall acquire land for Federal management solely with monies appropriated for that purpose.

The preamble to the final rule, at 51 FR 27719, explained that the rule contains a restriction on Federal land acquisition as a means of restoration or replacement, unless such acquisition is the only feasible restoration or replacement alternative. Even in this case, funds to acquire the land must be placed in the general fund of the Federal Treasury and requested by the Federal agency through the normal appropriations process. The purpose of this limitation was to restrict the acquisition of private lands for Federal management under CERCLA, and, thus, the expansion of the Federal estate, without specific Congressional approval.

In the reauthorization of CERCLA, Congress added to section 107(f)(1) of CERCLA the provision that:

Sums recovered by the United States Government as trustee under this subsection shall be retained by the trustee; without further appropriation, for use only to restore, replace, or acquire the equivalent of such natural resources. (emphasis added)

Therefore, the Department proposes to amend the final rule to delete the provisions requiring the use of the appropriation process for funds to acquire new lands when such acquisition is found to be necessary. The Department notes, however, that the acquisition of land for Federal management should be used only when such acquisition is the sole feasible restoration or replacement alternative. Also, in accordance with section 107(f)(1) of CERCLA and section 107(d)(2) of SARA, the Department is proposing to amend the rule to require that both sums recovered as damages and sums recovered as assessment costs by Federal or State trustees shall be retained by the trustee that incurred the cost.

K. Sixty-Day Notice

Section 11.91(d) of the final rule provided that the authorized official should allow up to 60 days for the potentially responsible party to respond to the damage claim demand. Section 113(b) of SARA amended section 113 of CERCLA to add subsection (g), relating to natural resource damage actions. Section 113(g) provides that, with respect to any facility listed on the National Priorities List, any Federal facility, or any vessel or facility at which a remedial action is otherwise scheduled, no action for damages may be commenced prior to 60 days after the authorized official provides to the President and the potentially responsible party a notice of intent to file suit. It is proposed to amend § 11.91(d) of the rule to incorporate this 60-day notice requirement.

L. Use of Sums Recovered as Damages

The final rule contained a requirement in §§ 11.92 and 11.93 that all sums awarded as damages under CERCLA be used for the purposes of restoration, replacement, or acquisition of equivalent resources. SARA amended the language of section 107(f)(1) of CERCLA to make this requirement explicit.

One area of confusion in the amendments to CERCLA is in that part of section 107(f) addressing the use of the sums recovered. In section 107 of SARA, that section specifically dealing with natural resources, Congress amended section 107(f)(1) of CERCLA to read:

Sums recovered by the United States government as trustee under this subsection shall be retained by the trustee; without
Further appropriation, for use only to restore, replace, or acquire the equivalent of such natural resources.

Sums recovered by a State as trustee under this subsection shall be available for use only to restore, replace, or acquire the equivalent of such natural resources by the State.

In section 207 of SARA, however, the earlier language of section 107(f) of CERCLA relating to the use of the sums recovered was amended to read:

Sums recovered shall be available for use to restore, rehabilitate, or acquire the equivalent of natural resources by the appropriate agencies of the Federal government the State government or the Indian tribe, but the measure of such damages shall not be limited by the sums which can be used to restore or replace such resources.

This amendment was worked to state that the words "Indian tribe" would be inserted after the phrase "State government." Since section 107 of SARA had already deleted this sentence and replaced it with new language, it is unclear whether or where Indian tribes would be included in the final amended language.

The Department notes that the confusion in the language of CERCLA, as amended, regarding the use of sums recovered by Indian tribes does not require further amendment to the final rule. The Department addressed the issue of the use of all sums recovered as a damage award in the final rule. The purpose of § 11.92(e) of the final rules (now § 11.92(c) of this proposed rule) is to require that all sums recovered as a damage award be used to restore or replace the injured natural resources according to the Restoration Plan required by section 111 (f) of CERCLA.

In addition, the Department notes that section 111 (f) of CERCLA was amended to require that:

Except in a situation requiring action avoid an irreversible loss of natural resources or to prevent or reduce any continuing danger to natural resources or similar need for emergency action, funds may not be used under this Act for the restoration, rehabilitation, or replacement or acquisition of the equivalent of any natural resources until a plan for the use of such funds for such purposes has been developed and adopted by affected Federal agencies and the Governor or Governors of any State having sustained damage to natural resources belonging to, managed by, controlled by, or appertaining to such tribe, or held in trust for the benefit of such tribe, or belonging to a member of such tribe if such resources are subject to a trust restriction on alienation.

Because Indian tribes were explicitly included in this restriction, all sums recovered as a damage award by a Federal or State trustee, or an Indian tribe, must be used to restore or replace the injured natural resource.

M. Correction

In the final rule, § 11.32(a)(1)(ii)(D) states that:

(D) When there is a natural resource claim against the Fund pursuant to section 111(c)(3) of CERCLA, the lead authorized official will be designated in accordance with the Natural Resource Claims Procedures, 40 CFR 300.20(b).

The reference to section 111(c)(3) of CERCLA is incorrect. Instead, the reference should be to section 111(c)(1) of CERCLA. The Department proposes to correct this statutory cite.

Authorship


The Department of the Interior has determined that this proposed rule does not constitute a major Federal action significantly affecting the quality of the human environment. Therefore, no further analysis pursuant to section 102(2)(C) of the National Environmental Policy Act of 1969 (43 U.S.C. 4332(2)(C)) has been prepared.

The Department of the Interior has determined that this document is not a major rule under Executive Order 12291 and certifies that this document will not impose any additional cost. In addition, the estimate of the potential economic effects of this proposed rule is well below $100 million annually. As the proposed rule applies to Federal and State agencies acting as trustees for natural resources and Indian tribes it is not expected to have an effect on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.). The proposed rule provides technical procedural guidance for the assessment of damages to natural resources. It does not directly impose any additional cost. In addition, the National Environmental Policy Act (CERCLA) as amended, 42 U.S.C. 9601 et seq., and the Clean Water Act (CWA), 33 U.S.C. 1251-1376, provide that Federal and State agencies who are authorized to act as trustees of natural resources or Indian tribes may assess damages to natural resources resulting from a discharge of oil or a release of a hazardous substance covered under CERCLA or the CWA and may seek to recover those damages. This part supplements the procedures established under the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR 300, for the identification, investigation, study, and response to a discharge of oil or release of a hazardous substance, and it provides a procedure by which a Federal or State agency acting as trustee or Indian tribe can determine compensation for injuries to natural resources that have not been nor are expected to be addressed by response actions conducted pursuant to the NCP. The assessment procedures set forth in this part are not mandatory. However, they must be used by Federal or State officials acting as trustees in order to obtain the rebuttable presumption contained in section 107(f)(3)(C) of CERCLA. This part applies to assessments initiated after the effective date of this final rule.

PART 11—NATURAL RESOURCE DAMAGE ASSESSMENTS

1. It is proposed to revise the authority citation for 43 CFR Part 11 to read as follows:

Authority: 42 U.S.C. 9651(c), as amended.

Subpart A—Introduction

2. It is proposed to revise § 11.10 to read as follows:

§ 11.10 Scope and applicability.

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, 42 U.S.C. 9601 et seq., and the Clean Water Act (CWA), 33 U.S.C. 1251-1376, provide that Federal and State agencies who are authorized to act as trustees of natural resources or Indian tribes may assess damages to natural resources resulting from a discharge of oil or a release of a hazardous substance covered under CERCLA or the CWA and may seek to recover those damages. This part supplements the procedures established under the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 CFR 300, for the identification, investigation, study, and response to a discharge of oil or release of a hazardous substance, and it provides a procedure by which a Federal or State agency acting as trustee or Indian tribe can determine compensation for injuries to natural resources that have not been nor are expected to be addressed by response actions conducted pursuant to the NCP. The assessment procedures set forth in this part are not mandatory. However, they must be used by Federal or State officials acting as trustees in order to obtain the rebuttable presumption contained in section 107(f)(3)(C) of CERCLA. This part applies to assessments initiated after the effective date of this final rule.
3. It is proposed to revise § 11.11 to read as follows:

§ 11.11 Purpose.

The purpose of this part is to provide standardized and cost-effective procedures for assessing natural resource damages. The results of an assessment performed by a Federal or State official according to these procedures shall be accorded the evidentiary status of a rebuttable presumption as provided in section 107(f)(2)(C) of CERCLA.

4. It is proposed to amend § 11.14 by revising paragraphs (d), (g), (l), (r), (w), (z), (ff), and (uu) and by adding a new paragraph (rr), to read as follows:

§ 11.14 Definitions.

(d) "Authorized official" means the Federal or State official to whom is delegated the authority to act on behalf of the Federal or State agency designated as trustee, or a designated official of an Indian tribe, pursuant to section 126(d) of CERCLA, to perform a natural resource damage assessment. As used in this part, authorized official is equivalent to the phrase "authorized official or lead authorized official," as appropriate.


(l) "Damages" means the amount of money sought by the Federal or State agency acting as trustee or Indian tribe as compensation for injury, destruction, or loss of natural resources as set forth in section 107(a) or 111(b) of CERCLA.

(r) "Fund" means the Hazardous Substance Superfund established by section 317 of the Superfund Amendments and Reauthorization Act of 1986.

(w) "Lead authorized official" means a Federal or State official authorized to act on behalf of all affected Federal or State agencies acting as trustees where there are multiple agencies, or a designated official of an Indian tribe where there are multiple tribes, affected because of coexisting or contiguous natural resources or concurrent jurisdiction.

(ff) "Rebuttable presumption" means the procedural device provided by section 107(f)(2)(C) of CERCLA describing the evidentiary weight that must be given to any determination or assessment of damages in any administrative or judicial proceeding under CERCLA or section 311 of the CWA made by a Federal or State trustee in accordance with the rule provided in this part.

(rr) "Trustee" means any Federal natural resources management agency designated in the NCP, 40 CFR Subpart G, and any State agency designated by the Governor of each State, pursuant to section 107(f)(2)(B) of CERCLA, that may prosecute claims for damages under section 107(f) or 111(b) of CERCLA.

(uu) "Indian tribe" means any Indian tribe, band, nation, or other organized group or community, including any Alaska Native village but not including any Alaska Native regional or village corporation, which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

5. It is proposed to amend § 11.15 by revising (a) introductory text and (c), by removing the period at the end of (a)(3)(iii) and adding the phrase "and" and by adding new (a)(4), (d), and (e) to read as follows:

§ 11.15 Actions against the responsible party for damages.

(a) In an action filed pursuant to section 107(f) of CERCLA, or section 311(f)(4) and (5) of the CWA, a Federal or State agency acting as a trustee, or Indian tribe acting pursuant to section 126(d) of CERCLA, who has performed an assessment in accordance with this rule may recover:

(1) In the case of a discharge or release of a hazardous substance identified or inferred from information of apparent injuries to natural resources that appear to be a result of a previously unidentified or unreported discharge of oil or release of a hazardous substance, he should first make reasonable efforts to determine whether a discharge or release has taken place. In the case of a discharge or release not yet reported or being investigated under the NCP the

- * * *

(c) Where an assessment determines that there is, in fact, no injury, as defined in § 11.82 of this part, the Federal or State agency acting as trustee, or Indian tribe acting pursuant to section 126(d) of CERCLA, may not recover assessment costs.

(d) There shall be no double recovery under this rule for damages or for assessment costs, that is, damages or assessment costs may only be recovered once, for the same discharge or release and natural resource, as set forth in section 107(f)(1) of CERCLA.

(e) Actions for damages and assessment costs shall comply with the statute of limitations set forth in section 113(g) of CERCLA.

Subpart B—Preassessment Screen

6. It is proposed to revise § 11.20 to read as follows:

§ 11.20 Notification and detection.

(a) Notification. (1) Section 104(b)(2) of CERCLA requires prompt notification of Federal and State natural resource trustees of potential damages to natural resources under investigation and requires coordination of the assessments, investigations, and planning under section 104 of CERCLA with such Federal and State trustees.

(2) The NCP at 40 CFR 300.52(d) and 300.64(d) provides for the OSC or lead agency to notify the Federal or State agency acting as trustee when natural resources have been or are likely to be injured by a discharge of oil or a release of a hazardous substance being investigated under the NCP.

(b) Previously unreported discharges or releases. If a Federal or State agency acting as trustee or Indian tribe identifies or is informed of apparent injuries to natural resources that appear to be a result of a previously unidentified or unreported discharge of oil or release of a hazardous substance, he should first make reasonable efforts to determine whether a discharge or release has taken place. In the case of a discharge or release not yet reported or been investigated under the NCP the
Federal or State agency acting as trustee or Indian tribe shall report that discharge or release to the appropriate authority as designated in the NCP 40 CFR 300.51(b) and 300.63(b).

(c) Identification of co-trustees. The Federal or State agency acting as trustee or Indian tribe should assist the OSC or lead agency, as needed, in identifying other Federal or State agencies or Indian tribes whose resources may be affected as a result of shared responsibility for the resources and who should be notified.

It is proposed to amend § 11.21 by revising (a)(1), (b), and (c) to read as follows:

§ 11.21 Emergency restorations.

(a) Reporting requirements and definition. (1) In the event of a natural resource emergency, the Federal or State agency acting as trustee or Indian tribe shall contact the National Response Center (800/424-8802) to report the actual or threatened discharge or release and to request that an immediate response action be taken.

(b) Emergency actions. If no immediate response actions are taken at the site of the discharge or release by the EPA or the U.S. Coast Guard within the time that the Federal or State agency acting as trustee or Indian tribe determines is reasonably necessary, or if such actions are insufficient, the Federal or State agency acting as trustee or Indian tribe should exercise any existing authority it may have to take on-site response actions. The Federal or State agency acting as trustee or Indian tribe shall determine whether the potentially responsible party, if his identity is known, is taking or will take any response action. If no-site response actions are taken, the Federal or State agency acting as trustee or Indian tribe may assert a claim if such Indian tribe has been adversely affected by the discharge or release.

(c) Limitations on emergency actions. The Federal or State agency acting as trustee or Indian tribe may undertake only those actions necessary to abate the emergency situation, consistent with their existing authorities. The normal procedures provided in this part must be followed before any additional restoration actions other than those necessary to abate the emergency situation are undertaken. The burden of proving that emergency restoration was required and that restoration costs were reasonable and necessary based on information available at the time rests with the Federal or State agency acting as trustee or Indian tribe.

8. It is proposed to amend § 11.23 by revising (b), (e) introductory text, (e)(2), (f)(4), (g)(1) introductory text, (g)(1)(i)(l), and (g)(2) to read as follows:

§ 11.23 Preassessment screen—general.

(b) Purpose. The purpose of the preassessment screen is to provide a rapid review of readily available information that focuses on resources for which the Federal or State agency may assert trusteeship under section 107(f) of CERCLA, or for which an Indian tribe may assert a claim, as specified in section 126(d) of CERCLA. This review should ensure that there is a reasonable probability of making a successful claim before monies and efforts are expended in carrying out an assessment.

(e) Criteria. Based on information gathered pursuant to the preassessment screen and on information gathered pursuant to the NCP the authorized official shall make a preliminary determination that all of the following criteria are met before proceeding with an assessment:

(1) Natural resources for which the Federal or State agency may assert trusteeship under CERCLA or for which an Indian tribe have been or are likely to have been adversely affected by the discharge or release;

(4) If the Federal or State agency acting as trustee or Indian tribe already has a process similar to the preassessment screen, and the requirements of the preassessment screen can be satisfied by that process, the processes may be combined to avoid duplication.

(g) Preassessment phase costs. (1) The following categories of reasonable and necessary costs may be incurred in the preassessment phase of the damage assessment:

(ii) Trustee or Indian tribe identification and notification costs;

(2) The reasonable and necessary costs for these categories shall be limited to those costs incurred by the authorized official for, and specifically allocable to, site-specific efforts taken during the preassessment phase for assessment of damages to natural resources for which the agency is acting as trustee or for which the Indian tribe may assert a claim. Such costs shall be supported by appropriate records and documentation and shall not reflect regular activities performed by the agency or Indian tribe in management of the natural resource. Activities undertaken as part of the preassessment phase shall be taken in a manner that is cost-effective, as that phrase is used in this part.

9. It is proposed to amend § 11.24 by revising (b)(1)(i) and (b)(2), and by adding (b)(3)(v) to read as follows:

§ 11.24 Preassessment screen—information on the site.

(b) * * *

(i) Resulting from the discharge or release were specifically identified as an irreversible and irretrievable commitment of natural resources in an environmental impact statement or other comparable environmental analysis, that the decision to grant the permit or license authorizes such commitment of natural resources, and that the facility or project was otherwise operating within the terms of its permit or license, so long as, in the case of damages to an Indian tribe occurring pursuant to a Federal permit or license, the issuance of that permit or license was not inconsistent with the fiduciary duty of the United States with respect to such Indian tribe; or

(v) Resulting from the release or threatened release of recycled oil from a service station dealer acting as any, personal described in section 107(a)-(3) or

(f) If the Federal or State agency acting as trustee or Indian tribe already has a process similar to the preassessment screen, and the requirements of the preassessment screen can be satisfied by that process, the processes may be combined to avoid duplication.

Subpart C—Assessment Plan Phase

10. It is proposed to amend § 11.30 by revising (c)(2) to read as follows:
§ 11.30 Assessment Plan—general.

(c) Assessment Plan phase costs.

(2) The reasonable and necessary costs for these categories shall be limited to those costs incurred or anticipated by the authorized official for, and specifically allocable to, site specific efforts taken in the development of an Assessment Plan for a resource for which the agency is acting as trustee, or for which an Indian tribe may assert a claim. Such costs shall be supported by appropriate records and documentation, and shall not reflect regular activities performed by the agency or tribe in management of the natural resource. Activities undertaken as part of the Assessment Plan phase shall be taken in a manner that is cost-effective, as that phrase is used in this part.

11. It is proposed to amend § 11.31 by revising (a)(4) to read as follows:

§ 11.31 Assessment Plan—content.

(a) General content and level of detail.

(4) The Assessment Plan shall contain procedures and schedules for sharing data, split samples, and results of analyses, when requested, with any identified potentially responsible parties and other Federal or State agencies acting as trustees or Indian tribes.

12. It is proposed to amend § 11.32 by revising (a) introductory text, (a)(1)(i), (a)(1)(ii) introductory text, (a)(1)(ii)(A) introductory text, (a)(1)(ii)(B), (C), (D), and (E), (a)(1)(iii), (c), and (e) to read as follows:

§ 11.32 Assessment Plan—development.

(a) Pre-development requirements.

The authorized official shall fulfill the following requirements before developing an Assessment Plan.

(1) Coordination.

(i) If the authorized official's responsibility is shared with other Federal or State agencies acting as trustees or Indian tribes as a result of coexisting or contiguous natural resources or concurrent jurisdiction, the authorized official shall ensure that all other known affected Federal and State agencies or Indian tribes are notified that an Assessment Plan is being developed. This notification shall include the results of the Preassessment Screen Determination.

(ii) Authorized officials from different agencies or Indian tribes are encouraged to cooperate and coordinate any assessments that involve coexisting or contiguous natural resources or concurrent jurisdiction. They may arrange to divide responsibility for implementing the assessment in any manner that is agreed to by all of the affected Federal and State agencies acting as trustees or Indian tribes with the following conditions:

(A) A lead authorized official shall be designated to administer the assessment. The lead authorized official shall act as coordinator and contact regarding all aspects of the assessment and shall act as final arbiter of disputes if consensus among the authorized officials cannot be reached regarding the development, implementation, or any other aspect of the Assessment Plan. The lead authorized official shall be designated by mutual agreement of all the Federal or State agencies or Indian tribes who may assert claims. If consensus cannot be reached as to the designation of the lead authorized official, the lead authorized official shall be designated in accordance with paragraphs (a)(1)(ii)(B), (C), (D), or (E) of this section.

(B) When the natural resources being assessed are located on lands or waters subject to the administrative jurisdiction of a Federal agency, a designated official of the Federal agency shall act as the lead authorized official.

(C) When the natural resources being assessed are located on lands or waters of an Indian tribe, the Indian tribe, or if such resources are subject to a trust restriction on alienation, any designated official of the Indian tribe, shall act as the lead authorized official, when acting pursuant to section 126(d) of CERCLA.

(D) For all other natural resources for which the State may assert trusteeship, a designated official of the State agency shall act as the lead authorized official.

(E) When there is a natural resource claim against the Fund pursuant to section 111[c](1) of CERCLA, the lead authorized official will be designated in accordance with the natural resource claims procedures, 40 CFR 306.20(b).

(iii) If there is a reasonable basis for dividing the assessment, the Federal or State agencies acting as trustee or an Indian tribe, acting pursuant to section 126(d) of CERCLA, may act independently and pursue separate assessments, actions or claims so long as the claims do not overlap. In these instances, the agencies shall coordinate their efforts, particularly those concerning the sharing of data and the development of the Assessment Plans.

13. It is proposed to amend § 11.40 by revising (c) to read as follows:

§ 11.40 Type A assessments—general.

(c) Type A assessment costs. The reasonable and necessary costs incurred in conducting assessments under this Subpart shall be limited to those costs incurred or anticipated by the authorized official for, and specially allocable to, incident-specific efforts taken in the assessment of damages for natural resources for which the agency
is acting as trustee or for which an Indian tribe may assert a claim. Such costs shall be supported by appropriate records and documentation, and shall not reflect regular activities performed by the agency or the Indian tribe in management of the natural resource. Activities undertaken as part of the damage assessment phase shall be taken in a manner that is cost-effective, as that phrase is used in this Part.

Subpart E—Type B Assessments

14. It is proposed to amend § 11.60 by revising (d)(2) to read as follows:

§ 11.60 Type B assessments—general.

* * * * *

(d) Type B assessment costs.

* * * * *

(2) The reasonable and necessary costs for those categories shall be limited to those costs incurred or anticipated by the authorized official for, and specifically allocable to, site specific efforts taken in the assessment of damages for a natural resource for which the agency is acting as trustee, or for which an Indian tribe may assert a claim. Such costs shall be supported by appropriate records and documentation, and shall not reflect regular activities performed by the agency or the Indian tribe in management of the natural resource. Activities undertaken as part of the damage assessment phase shall be taken in a manner that is cost-effective, as that phrase is used in this part.

15. It is proposed to amend § 11.71 by revising (g) introductory text, (g)(1) and by adding new paragraph (g)(5) to read as follows:

§ 11.71 Quantification phase—service reduction quantification.

* * *

(g) Statutory exclusions. In quantifying the effects of the injury, the following statutory exclusions shall be considered, as provided in section 107(f), (i), and (j) and 114(c) of CERCLA, that exclude compensation for damages to natural resources that were a result of:

(1) An irreversible and irretrievable commitment of natural resources identified in an environmental impact statement or other comparable environmental analysis, and the decision to grant the permit or license authorizes such a commitment, and the facility is otherwise operating within the terms of its permit or license, so long as, in the case of damages to an Indian tribe occurring pursuant to a Federal permit or license, the issuance of that license or permit was not inconsistent with the fiduciary duty of the United States with respect to such Indian tribe;

or

(5) Resulting from the release or threatened release of recycled oil from a service station dealer acting as any person described in section 307(a)(2) or (4) of CERCLA if such recycled oil is not mixed with any other hazardous substance and is stored, treated, transported or otherwise managed in compliance with regulations or standards promulgated pursuant to section 3014 of the Solid Waste Disposal Act and other the applicable authorities.

* * * * *

16. It is proposed to amend § 11.81 of this part, use values to the tribe as follows:

§ 11.81 Damage determination phase—use value methodologies.

* * * * *

(b) Use values. (1) For the purposes of this paragraph, use values are the value to the public of recreational or other public uses of the resource, as measured by changes in consumer surplus, any fees or other payments collectable by the government or Indian tribe for a private party's use of the natural resources, and any economic rent accruing to a private party because the government or Indian tribe does not charge a fee or price for the use of the resource.

(2) Estimation of option and existence values shall be used only if the authorized official determines that no use values can be determined.

(3) In instances where the Federal or State agency acting as trustee or Indian tribe is the majority operator or controller of a for- or not-for-profit enterprise, and the injury to the natural resource results in a loss to such an enterprise, that portion of the lost net income due the agency from this enterprise resulting directly or indirectly from the injury to the natural resource may be included as a measure of damages under this part.

19. It is proposed to amend § 11.84 by revising (i) to read as follows:

§ 11.84 Damage determination phase—implementation guidance.

* * * * *

(i) Scope of the analysis. The authorized official must determine the scope of the analysis in order to estimate a diminution of use values.

(2) In assessments where the scope of analysis is Federal, only the diminution of use values to the Nation as a whole should be counted.

(3) In assessments where the scope of analysis is at the State level, only the diminution of use values to the State should be counted.

(4) In assessments where the scope of analysis is at the tribal level, only the diminution of use values to the tribe should be counted.

Subpart F—Post Assessment Phase

20. It is proposed to revise § 11.91 to read as follows:

§ 11.91 Post-assessment phase—demand.

(a) Requirement and content. At the conclusion of the assessment the authorized official shall present to the potentially responsible party a demand in writing for a sum certain, representing the damages determined in accordance with the requirements and guidance of $11.40 or of § 11.60 of this part, and including the reasonable cost of the
assessment, and as adjusted, if necessary, by the guidance in §11.92(b) of this Part, delivered in such a manner as will establish the date of receipt. The demand shall be adequately identify the Federal or State agency or Indian tribe asserting the claim, the general location and description of the injured resource; identification of the type of discharge or release determined to have resulted in the injuries, and the damages sought from that party.

(b) Report of Assessment. The demand letter shall include the Report of Assessment as an attachment.

c) Rebuttable presumption. When performed by a Federal or State official in accordance with this part, the natural resource damage assessment and the resulting Damage Determination supported by a complete administrative record of the assessment including the Report of Assessment as described in § 11.90 of this part shall have the force and effect of a rebuttable presumption on behalf of any Federal or State claimant in any judicial or adjudicatory administrative proceeding under CERCLA, or section 311 of the CWA.

d) Potentially responsible party response. The authorized official should, and as provided in section 113(g)(1) of CERCLA, in some cases must, allow at least 60 days from receipt of the demand by the potentially responsible party, with reasonable extensions granted as appropriate, for the potentially responsible party to acknowledge and respond to the demand, prior to filing suit.

21. It is proposed to revise §11.92 to read as follows:

§ 11.92 Post-assessment phase—restoration account.

(a) Disposition of recoveries. (1) All sums (damage claim and assessment costs) recovered pursuant to section 107(f) of CERCLA or section 311(f)(4) and (5) of the CWA by the Federal government acting as trustee shall be retained by the trustee, without further appropriation, in a separate account in the United States Treasury.

(2) All sums (damage claim and assessment costs) recovered pursuant to section 107(f) of CERCLA, or section 311(f)(4) and (5) of the CWA by a State government acting as trustee shall either:

(i) Be placed in a separate account in the State treasury; or

(ii) Be placed by the responsible party or parties in an interest bearing account payable in trust to the State agency acting as trustee.

(3) All sums (damage claim and assessment costs) recovered pursuant to section 107(f) of CERCLA or section 311(f)(4) and (5) of the CWA by an Indian tribe shall either:

(i) Be placed in an account in the tribal treasury; or

(ii) Be placed by the responsible party or parties in an interest bearing account payable in trust to the Indian tribe.

(b) Adjustments. (1) In establishing the account pursuant to paragraph (a) of this section, the calculation of the expected present value of the damage amount should be adjusted, as appropriate, whenever monies are to be placed in a non-interest bearing account. This adjustment should correct for the anticipated effects of inflation over the time estimated to complete expenditures for the restoration or replacement.

22. It is proposed to amend §11.93 by revising (c) to read as follows:


(c) Modifications may be made to the Restoration Plan as become necessary as the restoration proceeds. Significant modifications shall be made available for review by any responsible party, any affected Federal or State agencies acting as trustees or Indian tribes, and any other interested members of the public for a period of at least 30 days, with reasonable extensions granted as appropriate before tasks called for in the modified plan are begun.

[FR Doc. 87-8779 Filed 4-16-87; 8:45 am]
BILLING CODE 4310-10-M
Reader Aids

INFORMATION AND ASSISTANCE

SUBSCRIPTIONS AND ORDERS
Subscriptions (public) 202-783-3238
Problems with subscriptions 275-3054
Subscriptions (Federal agencies) 523-5240
Single copies, back copies of FR 763-3238
Magnetic tapes of FR, CFR volumes 275-1184
Public laws (Slip laws) 275-3030

PUBLICATIONS AND SERVICES
Daily Federal Register
General information, index, and finding aids 523-5227
Public inspection desk 523-5215
Corrections 523-5237
Document drafting information 523-5237
Legal staff 523-4534
Machine readable documents, specifications 523-3408

Code of Federal Regulations
General information, index, and finding aids 523-5227
Printing schedules and pricing information 523-3419
Laws 523-5230

Presidential Documents
Executive orders and proclamations 523-5230
Public Papers of the President 523-5230
Weekly Compilation of Presidential Documents 523-5230

United States Government Manual 523-5230

Other Services
Library 523-5240
Privacy Act Compilation 523-4534
TDD for the deaf 523-5229

FEDERAL REGISTER PAGES AND DATES, APRIL
10357-10556................. 1
10557-10724................. 2
10725-10874................. 3
10875-11018................. 6
11019-11184................. 7
11185-11452................. 8
11453-11610................. 9
11611-11808................. 10
11807-11980................. 13
11981-12128................. 14
12129-12382................. 15
12383-12510................. 16
12511-12896................. 17

CFR PARTS AFFECTED DURING APRIL

3 CFR
419................. 11078
420................. 11078
421................. 11078
424................. 11078
427................. 11078
432................. 11078
448................. 11078
469................. 12535
910................. 12536
945................. 10893

5 CFR
213................. 11185
591................. 12131
841................. 12131
870................. 12133
1291................. 10875

6 CFR
212................. 11620
245................. 11621

7 CFR
210................. 11186
271................. 11181
272................. 11021, 11811
273................. 11021, 11811
274................. 11811
276................. 11811
307................. 10357, 12363
309................. 10357, 10364
713................. 10725
717................. 10725
724................. 10725
725................. 10725
726................. 10725
770................. 10725
807................. 10726, 11615, 1251
910................. 10726, 11615, 1251
917................. 12512
925................. 11616
927................. 11616
932................. 12134
948................. 12513
993................. 12515
1040................. 11455
1097................. 10729
1137................. 10730
1434................. 11617-1619
1468................. 10731
1472................. 10731
1475................. 10725
1922................. 11981
1944................. 11981
1951................. 11458, 11981

3 CFR
220................. 12419
246................. 12527
400................. 10764
418................. 11078

11 CFR
100................. 11187
102................. 11187
103................. 11187
104................. 11187
110................. 11187

12 CFR
202................. 10732
203................. 10365
205................. 10734
228................. 10875
### Proposed Rules:

<table>
<thead>
<tr>
<th>Proposed Rules:</th>
<th>11819</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>10568</td>
</tr>
<tr>
<td>85</td>
<td>10568</td>
</tr>
<tr>
<td>123</td>
<td>10568</td>
</tr>
<tr>
<td>141</td>
<td>10568</td>
</tr>
<tr>
<td>142</td>
<td>10568</td>
</tr>
<tr>
<td>143</td>
<td>10568</td>
</tr>
<tr>
<td>180</td>
<td>10568</td>
</tr>
<tr>
<td>261</td>
<td>10568</td>
</tr>
<tr>
<td>264</td>
<td>10568</td>
</tr>
<tr>
<td>265</td>
<td>10568</td>
</tr>
<tr>
<td>280</td>
<td>10568</td>
</tr>
<tr>
<td>300</td>
<td>10568</td>
</tr>
<tr>
<td>721</td>
<td>10568</td>
</tr>
<tr>
<td>41 CFR</td>
<td>10568</td>
</tr>
<tr>
<td>101-20</td>
<td>10568</td>
</tr>
<tr>
<td>101-28</td>
<td>10568</td>
</tr>
<tr>
<td>101-41</td>
<td>10568</td>
</tr>
<tr>
<td>201-32</td>
<td>10568</td>
</tr>
<tr>
<td>42 CFR</td>
<td>10568</td>
</tr>
<tr>
<td>7</td>
<td>10568</td>
</tr>
<tr>
<td>400</td>
<td>10568</td>
</tr>
<tr>
<td>482</td>
<td>10568</td>
</tr>
<tr>
<td>1001</td>
<td>10568</td>
</tr>
<tr>
<td>1003</td>
<td>10568</td>
</tr>
<tr>
<td>Proposed Rules:</td>
<td>10568</td>
</tr>
<tr>
<td>405</td>
<td>10568</td>
</tr>
<tr>
<td>43 CFR</td>
<td>10568</td>
</tr>
<tr>
<td>426</td>
<td>10568</td>
</tr>
<tr>
<td>2090</td>
<td>10568</td>
</tr>
<tr>
<td>Proposed Rules:</td>
<td>10568</td>
</tr>
<tr>
<td>1</td>
<td>10568</td>
</tr>
<tr>
<td>44 CFR</td>
<td>10568</td>
</tr>
<tr>
<td>64</td>
<td>10568</td>
</tr>
<tr>
<td>Proposed Rules:</td>
<td>10568</td>
</tr>
<tr>
<td>5</td>
<td>10568</td>
</tr>
<tr>
<td>6</td>
<td>10568</td>
</tr>
<tr>
<td>67</td>
<td>10568</td>
</tr>
<tr>
<td>45 CFR</td>
<td>10568</td>
</tr>
<tr>
<td>Ch. II</td>
<td>10568</td>
</tr>
<tr>
<td>Ch. III</td>
<td>10568</td>
</tr>
<tr>
<td>Ch. IV</td>
<td>10568</td>
</tr>
<tr>
<td>Ch. X</td>
<td>10568</td>
</tr>
<tr>
<td>2201</td>
<td>10568</td>
</tr>
<tr>
<td>Proposed Rules:</td>
<td>10568</td>
</tr>
<tr>
<td>503</td>
<td>10568</td>
</tr>
<tr>
<td>46 CFR</td>
<td>10568</td>
</tr>
<tr>
<td>401</td>
<td>10568</td>
</tr>
<tr>
<td>Proposed Rules:</td>
<td>10568</td>
</tr>
<tr>
<td>Chapter I</td>
<td>10568</td>
</tr>
<tr>
<td>154</td>
<td>10568</td>
</tr>
<tr>
<td>276</td>
<td>10568</td>
</tr>
<tr>
<td>382</td>
<td>10568</td>
</tr>
<tr>
<td>502</td>
<td>10568</td>
</tr>
<tr>
<td>503</td>
<td>10568</td>
</tr>
<tr>
<td>586</td>
<td>10568</td>
</tr>
<tr>
<td>47 CFR</td>
<td>10568</td>
</tr>
<tr>
<td>0</td>
<td>10568</td>
</tr>
</tbody>
</table>

### LIST OF PUBLIC LAWS

Note: No public bills which have become law were received by the Office of the Federal Register for inclusion in today's List of Public Laws.

Last List April 13, 1987

<table>
<thead>
<tr>
<th>LIST OF PUBLIC LAWS</th>
</tr>
</thead>
<tbody>
<tr>
<td>48 CFR</td>
</tr>
<tr>
<td>7</td>
</tr>
<tr>
<td>203</td>
</tr>
<tr>
<td>205</td>
</tr>
<tr>
<td>215</td>
</tr>
<tr>
<td>216</td>
</tr>
<tr>
<td>217</td>
</tr>
<tr>
<td>225</td>
</tr>
<tr>
<td>227</td>
</tr>
<tr>
<td>243</td>
</tr>
<tr>
<td>245</td>
</tr>
<tr>
<td>252</td>
</tr>
<tr>
<td>522</td>
</tr>
<tr>
<td>542</td>
</tr>
<tr>
<td>552</td>
</tr>
<tr>
<td>5315</td>
</tr>
<tr>
<td>Proposed Rules:</td>
</tr>
<tr>
<td>225</td>
</tr>
<tr>
<td>509</td>
</tr>
</tbody>
</table>

| 49 CFR              |
| 219                 | 10568 |
| 604                 | 10568 |
| 1003                | 10568 |
| 1043                | 10568 |
| 1052                | 10568 |
| 1054                | 10568 |
| 1207                | 10568 |
| 1244                | 10568 |
| 1249                | 10568 |
| Proposed Rules:     | 10568 |
| 571                 | 10568 |
| 1312                | 10568 |
| 1320                | 10568 |

| 50 CFR              |
| 17                  | 10568 |
| 301                 | 10568 |
| 611                 | 10568 |
| 642                 | 10568 |
| 652                 | 10568 |
| 663                 | 10568 |
| 672                 | 10568 |
| 675                 | 10568 |
| 685                 | 10568 |
| Proposed Rules:     | 10568 |
| 222                 | 10568 |
| 227                 | 10568 |
| 640                 | 10568 |
| 642                 | 10568 |
| 651                 | 10568 |
| 652                 | 10568 |