



FEDERAL REGISTER

VOLUME 5 NUMBER 241

Washington, Thursday, December 12, 1940

The President

ADMINISTRATION OF SECTION 6 OF THE ACT ENTITLED, "AN ACT TO EXPEDITE THE STRENGTHENING OF THE NATIONAL DEFENSE" APPROVED JULY 2, 1940

BY THE PRESIDENT OF THE UNITED STATES OF AMERICA

A PROCLAMATION

WHEREAS section 6 of the act of Congress entitled "AN ACT To expedite the strengthening of the national defense," approved July 2, 1940, provides as follows:

Sec. 6. Whenever the President determines that it is necessary in the interest of national defense to prohibit or curtail the exportation of any military equipment or munitions, or component parts thereof, or machinery, tools, or material, or supplies necessary for the manufacture, servicing, or operation thereof, he may by proclamation prohibit or curtail such exportation, except under such rules and regulations as he shall prescribe. Any such proclamation shall describe the articles or materials included in the prohibition or curtailment contained therein. In case of the violation of any provision of any proclamation, or of any rule or regulation, issued hereunder, such violator or violators, upon conviction, shall be punished by a fine of not more than \$10,000, or by imprisonment for not more than two years, or by both such fine and imprisonment. The authority granted in this section shall terminate June 30, 1942, unless the Congress shall otherwise provide.

NOW, THEREFORE, I, FRANKLIN D. ROOSEVELT, President of the United States of America, acting under and by virtue of the authority vested in me by the aforesaid act of Congress, do hereby proclaim that upon the recommendation of the Administrator of Export Control I have determined that it is necessary in the interest of the national defense that on and after December 30, 1940, the following-described articles and materials shall not be exported from the United States except when authorized in each case by a license as provided for in Proclamation No. 2413 of July 2, 1940,¹ entitled "Administration of section 6 of the act entitled 'AN Act to expedite the strengthening of the national defense' approved July 2, 1940.'":

IRON AND STEEL

¹ 5 F.R. 2467.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the seal of the United States of America to be affixed.

DONE at the City of Washington this tenth day of December, in the year of our Lord nineteen hundred and [SEAL] forty, and of the Independence of the United States of America the one hundred and sixty-fifth.

FRANKLIN D. ROOSEVELT

By the President:

CORDELL HULL,
Secretary of State.

[No. 2449]

[F. R. Doc. 40-5509; Filed, December 11, 1940;
10:18 a. m.]

EXECUTIVE ORDER

PREScribing REGULATIONS GOVERNING THE EXPORTATION OF ARTICLES AND MATERIALS DESIGNATED IN THE PRESIDENT'S PROCLAMATION OF DECEMBER 10, 1940, ISSUED PURSUANT TO THE PROVISIONS OF SECTION 6 OF THE ACT OF CONGRESS APPROVED JULY 2, 1940

Pursuant to the authority vested in me by the provisions of section 6 of the Act of Congress approved July 2, 1940, entitled "AN ACT To expedite the strengthening of the national defense," I hereby prescribe the following additional regulations governing the exportation of:

IRON AND STEEL

1. As used in my proclamation of December 10, 1940,¹ issued pursuant to the provisions of section 6 of the Act of Congress approved July 2, 1940, and in these regulations, the terms "iron" and "steel" shall be construed as defined herein:

Iron and Steel:

A. Iron ore (6001)

B. Pig iron (6007)

C. Ferro Alloys

Ferromanganese (6213)

Spiegeleisen (6213)

Ferrosilicon

Ferrochrome

Ferrotungsten

Ferrovandium

Ferrocolumbium

Ferrocobaltitanium

Ferrophosphorus

Ferromolybdenum

(6220)

¹ See column 1.

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2. The number or numbers in parenthesis following each material or article designed in paragraph 1 hereof corresponds to the "Commodity Number" prefixed to the "Commodity Description" as set out in Schedule B, "Statistical Classification of Domestic Commodities Exported from the United States," effective January 1, 1939, as amended, issued by the United States Department of Commerce.

3. Paragraph d., h., l., t., and u., of regulation 1 of the regulations issued July 2, 1940,² pursuant to the Act of July 2, 1940, in so far as they apply to ferro alloys, are modified in accordance with the foregoing definitions. Regulations 2 to 12, inclusive, of the regulations issued July 2, 1940, pursuant to the Act of July 2, 1940, are applicable to the exportation of iron and steel.

FRANKLIN D ROOSEVELT

THE WHITE HOUSE,
December 10, 1940.

[No. 8607]

[F. R. Doc. 40-5510; Filed, December 11, 1940; 10:18 a. m.]

Rules, Regulations, Orders

TITLE 8—ALIENS AND CITIZENSHIP
CHAPTER I—IMMIGRATION AND NATURALIZATION SERVICE

[Chinese General Order No. C-1]

PART 40—PORTS OF ENTRY FOR CHINESE PERSONS

DESIGNATION OF MIAMI, FLORIDA

Pursuant to the authority contained in section 8 of the Act of September 13, 1888,

²5 F.R. 2469.

as amended (25 Stat. 478, 32 Stat. 176, 33 Stat. 428; 8 U.S.C. 278); section 2 of the Act of April 29, 1902, as amended (32 Stat. 176, 33 Stat. 591; 8 U.S.C. 296); section 7 of the Act of February 14, 1903 (32 Stat. 828; 8 U.S.C. 261); section 3 of the Act of March 4, 1913 (37 Stat. 737; 5 U.S.C. 616); section 23 of the Act of February 5, 1917 (39 Stat. 892; 8 U.S.C. 102); section 24 of the Act of May 26, 1924 (43 Stat. 166; 8 U.S.C. 222), and section 1 of Reorganization Plan No. V (5 F.R. 2223), the port of Miami, Florida, is hereby designated as a port of entry into the United States for Chinese persons.

Section 40.1, Title 8, Chapter I, Code of Federal Regulations (Rule 1, Subd. 1, Par. 1 of the Rules Governing the Admission of Chinese of October 1, 1926), is amended by inserting Miami, Florida, between San Diego, California, and New Orleans, Louisiana, in the list of ports of entry for Chinese persons.

ROBERT H. JACKSON,
Attorney General.

Approval recommended:

HENRY M. HART, Jr.,
Special Assistant to the Attorney General in charge pro tem Immigration and Naturalization Service.

[F. R. Doc. 40-5508; Filed, December 11, 1940; 9:51 a. m.]

TITLE 9—ANIMALS AND ANIMAL PRODUCTS

CHAPTER II—AGRICULTURAL MARKETING SERVICE

PART 203—AUTHORIZATIONS FOR INSPECTION OF LIVESTOCK

NORTH DAKOTA STOCKMEN'S ASSOCIATION, AMENDMENT

By virtue of the authority vested in the Secretary of Agriculture by the Department of Agriculture Appropriation Act, 1941 (Public, No. 658, 76th Congress), approved June 25, 1940, Section 203.5, Part 203, Chapter II, Title 9, Code of Federal Regulations, is amended to read as follows:

§ 203.5 North Dakota Stockmen's Association. Upon a written request made to and filed with the Secretary of Agriculture, the North Dakota Stockmen's Association, duly organized under the laws of the State of North Dakota, is hereby authorized, with respect to livestock originating in or shipped to market from the State of North Dakota, to charge and collect reasonable fees to be paid by the owners of the livestock inspected for the inspection of brands appearing upon the livestock sold or offered for sale at those markets at which the said North Dakota Stockmen's Association may register as a market agency, such inspection to be made to determine the ownership of the livestock. Such inspection and charging and collection of fees shall be subject to the provisions of the Packers and Stockyards Act and such

regulations as the Secretary may from time to time prescribe.

Done at Washington, D. C., this 10th day of December 1940. Witness my hand and the seal of the Department of Agriculture.

[SEAL] PAUL H. APPELBY,
Acting Secretary of Agriculture.

[F. R. Doc. 40-5511; Filed, December 11, 1940;
10:26 a. m.]

TITLE 49—TRANSPORTATION AND
RAILROADS
CHAPTER I—INTERSTATE COM-
MERCE COMMISSION

[No. 3666]

REGULATIONS FOR TRANSPORTATION OF
EXPLOSIVES AND OTHER DANGEROUS
ARTICLES

At a session of the Interstate Commerce Commission, Division 3, held at its office in Washington, D. C., on the 26th day of November, A. D. 1940.

The matter of regulations for the transportation of explosives and other dangerous articles by land and water by carriers engaged in rail-freight, rail-express, rail-baggage, water, and highway services, being under further consideration:

And it appearing, That pursuant to section 233 of the Criminal Code (Transportation of Explosives Act), 41 Stat. 1445, the Commission, by order of Division 3, dated August 16, 1940, established revised regulations for the transportation of explosives and other dangerous articles applying to all shippers of the articles by way of common carriers engaged in interstate or foreign commerce by land or water and to such common carriers of the articles by rail and by highway, which revised regulations, except for further order of the Commission, will cancel and supersede on the effective date of January 7, 1941, certain regulations made effective by the Commission on October 1, 1930, and amendments thereto, including Part V thereof (effective February 1, 1935), as amended, applying to common carriers by water, and discontinue on the effective date of January 7, 1941, all current provisions of said Part V as amended, pending promulgation by the Secretary of Commerce of revised regulations for those carriers by water;

It further appearing, That Public No. 809, 76th Congress, approved October 9, 1940, transfers from the Commission to the Secretary of Commerce the duty of prescribing such regulations applying to said carriers by water, and provides in section 9 thereof that the Act shall become effective 6 months after the date of approval, namely, April 9, 1941, except that such initial regulations as may be necessary to make the Act effective shall be promulgated within 90 days from the date of approval, namely, on or before January 7, 1941, unless the President accelerate action under the section;

And it further appearing, That according to information conveyed to the Commission by letter of the Acting Secretary of Commerce, dated November 19, 1940, it is contemplated that such initial regulations will not be made effective before April 9, 1941, and that pursuant to said section 233 of the Criminal Code the Commission may by order continue in full force and effect until April 8, 1941, inclusive, the regulations in said Part V as amended, insofar as applicable to common carriers by water, and may further amend or cancel any of those regulations to provide the best-known practicable means for securing safety in transit, and good cause appearing therefor:

It is ordered, That the said order of Division 3, dated August 16, 1940, providing for the cancellation on January 7, 1941, of regulations effective October 1, 1930, as amended, including Part V thereof effective February 1, 1935, as amended, be and is hereby vacated in part, and the said Part V, as amended by our previous orders and by the following changes, insofar as applicable to common carriers by water engaged in interstate or foreign commerce, shall be and continue in full force and effect only until April 8, 1941, inclusive, and shall be fully observed, until the expiration date specified, by all such carriers of explosives and other dangerous articles named or described in the aforesaid Commission's regulations as amended, unless otherwise ordered by the Commission:

PART V—WATER

Car Floats, Ferries, and Like Vessels

A. (Reissue) For the purpose of these regulations, a car ferry or car float shall be considered as an extension of rail line, and regulations of the Commission for the transportation of explosives and other dangerous articles by rail shall apply thereto: *Provided,* That no car ferry or car float or other ferry vessel which carries passengers shall transport any dangerous explosive prohibited for transportation on vessels carrying passengers by section 232 or 234 of the act of March 4, 1921, nor any tank car or tank truck or other vehicle carrying any tank containing inflammable liquid, inflammable compressed gas, chlorine, or sulphur dioxide. The carriage on any car ferry or car float or other ferry vessel of any motor truck or other vehicle containing any explosive or other dangerous article (other than those forbidden for transportation) shall only be in packages in full compliance with regulations prescribed herein for transportation by water.

Transportation of cars containing explosives or other dangerous articles, packed and loaded therein and otherwise in full compliance with regulations for the transportation of these articles by rail, is authorized on Seatrain Lines or other similar vessels: *Provided,* That no

such vessel when carrying passengers for hire may transport any explosive prohibited for transportation on vessels carrying passengers for hire by section 232 or 234 of the Transportation of Explosives Act.

General Regulations

B. (Add) Explosives or other dangerous articles authorized by par. W2 (d) of Part V effective February 1, 1935, to be exported from the United States when packed, marked, labeled, and described, in accordance with rules and regulations in force at destination ports, must not be offered to any common carrier for domestic transportation unless in full accordance with regulations applying to domestic shipments of the same articles subject to these regulations.

C. (Add) The packing, packaging, labeling, and marking, of explosives and other dangerous articles for transportation by water must be as specified in regulations effective January 7, 1941.² Acceptance for transportation by water must be in accordance with Part V effective Feb. 1, 1935, as amended, including changes herein and in regulations effective January 7, 1941.²

D. (Add) Articles shown as semi-hazardous articles in Part V effective Feb. 1, 1935, with additions, are described herein as hazardous articles.

Hazardous articles involve special risk to vessel, passengers, or crew, or are liable to spontaneous heating or self-combustion, or to liberate vapor augmentative of fire. Combustible liquids have flash point above 80° to 150° F. by Tagliabue's open-cup tester. See regulations effective January 7, 1941,² for general packing requirements applying to all shipments.

E. (Add) Billing of articles for transportation by water on shipping orders, manifests, cargo lists, bills of lading, or other shipping papers, must be in accordance with descriptions in commodity list of regulations effective January 7, 1941, Part 2.

F. (Add) Endorsements required on manifests, cargo lists, or other billing, must be as specified in section 584 of regulations effective January 7, 1941, Part 4.

G. (Add) (a) Additional articles not named in Part V effective February 1, 1935, together with appropriate stowage, are listed below.

(b) Properties of new articles, labels, and outside containers, are specified in regulations effective January 7, 1941.²

(c) Paragraphs bearing numbers without prefix letter "W" referred to in connection with the stowage chart and in other places in Part V effective Feb. 1, 1935, will be found in corresponding sections of regulations effective January 7, 1941.²

(d) Section numbers referred to in the list below are those contained in regulations effective January 7, 1941.²

²Parts 1-3, 5, 6, page 4903, this issue.

(Add or Amend) Recommended Stowage of Explosives and Other Dangerous Articles

Comb. L. = Combustible liquid, no label. See sec. D herein
 Haz. = Hazardous, no label. See sec. D herein
 *See explanation in sec. 4 of regulations effective January 7, 1941.

Article	Stowage
Acrylonitrile	Freight vessels, A, B, or E. Separate from foodstuffs.
Alcohol, allyl, liquid	do.
Ammonium arsenate, solid	B or D, separate from acids.
Ammonium bichromate	B or E.
Ammonium permanganate	do.
Amyl alcohol (Comb. L.)	do.
Amyl alcohol, iso (Comb. L.)	do.
Amyl alcohol, normal (Comb. L.)	do.
Amyl alcohol, secondary (diethylcarbinol) (Methylpropylcarbinol) (Comb. L.)	do.
Amyl nitrite	Freight vessels, A, B, or E. Separate from foodstuffs.
*Anti-freeze compounds, liquid	A, B, or E.
Arsenic bromide, solid	do.
Arsenic chloride (arsenous), liquid	do.
Arsenic iodide, solid	do.
Arsenic pentoxide, solid	do.
Arsenic sulfide (powder), solid	do.
Arsenical flue dust	do.
Arsenous acid, solid	do.
Arsenous and mercuric iodide solution, liquid	do.
*Automobiles, motorcycles, tractors, or other self-propelled vehicles with charged electric storage batteries.	A, B, D, or E.
Barium chlorate, wet	Freight vessels, B or D, in separate hold from ammonia compounds or acids.
Barium cyanide, solid	Separate from foodstuffs.
Barium perchlorate	Freight vessels, B or D, in separate hold from ammonia compounds or acids.
Barium permanganate	Freight vessels, B or D, passenger vessels in metal or glass, boxed, D. Not regulated. A, B, D, or E.
Batteries, dry	E.
Batteries, electric storage, wet, with automobiles or auto parts.	B or E.
Batteries, electric storage, wet, with containers of corrosive battery fluid.	C. See par. W70. Separate from foodstuffs.
Benzaldehyde	do.
Bone, chipped, hot (Haz.)	Freight vessels, A.
Bordeaux arsenites, liquid	D, keep cool.
Bordeaux arsenites, solid	No restrictions.
Boron trichloride	B or E.
Boron trifluoride	Separate from foodstuffs.
Bottles, acid, or other corrosive liquid, empty (Haz.)	B, D, or E. See par. W70.
Brombenzene (brombenzol) (monobrombenzene)	do.
Burcap, solid (dimethoxy strychnine)	Separate from foodstuffs.
Burlap, (Hessian) flax, jute, hemp, Manila (Haz.)	B, D, or E. See par. W70.
Burnt fiber	D.
Burnt lime	D.
Butadiene. See Liquefied petroleum gas.	
Butyl acetate	Separate from foodstuffs.
Cacodylic acid, solid (dimethyl-arsenic)	B or E.
Calcium arsenite, solid	do.
Calcium chlorite	A or E.
Calcium hypochlorite	B or C.
Calcium, metallic	Freight vessels, B or D, passenger vessels, B, keep dry.
Calcium peroxide	Freight vessels, B or D, passenger vessels, B, keep dry.
Calcium permanganate	Freight vessels, B or D, passenger vessels in glass or metal, boxed, D.
Camphor (crude) (refined) (Haz.)	Separate from foodstuffs. See par. W70.
Camphor oil (Haz.)	B or E.

(Add or Amend) Recommended Stowage of Explosives and Other Dangerous Articles—Continued

Storage

Article

Carbon dioxide syphon bulbs	C or D.
Carbon monoxide	B, keep cool.
Charcoal, activated	C or D.
Charcoal, shell	C or D.
Chlorates, n. o. s., wet	Freight vessels, B or D, separate from ammonium compounds and acids; passenger vessels, in glass or metal, boxed, D.
*Chlorobenzol	Freight vessels, B or E, passenger vessels, A, B or E.
Chloroethyl acetate (ethylchloroacetate) (Haz.)	B or E.
Chlorosulfonic acid-sulfur trioxide mixture	Freight vessels, A.
Chlorpelin mixtures	Freight vessels, B.
Chromic acid solution	Freight vessels, A.
Coal briquettes, hot	Not accepted.
Coal tar oil (coal tar distillate)	Freight vessels, B or E, passenger vessels, B, separate from foodstuffs.
Cocculus, solid, (fish berry)	Not accepted.
Coke, hot	B or E.
Combustible liquid, n. o. s. (Haz.)	Freight vessels, B or E, passenger vessels, A, in pint containers, boxed, E.
*Compounds, enamel	B or E. Separate from foodstuffs.
Compounds, liquid, n. o. s. (Comb. L.)	do.
Copper acetarsenite, solid (Paris green, emerald green, imperial green, Kings green, moss green, meadow green, mitis green, parrot green, Vienna green)	do.
Copper arsenite, solid (Scheele's green, cupric green, copper orthoarsenite, mineral green, Swedish green)	do.
Copra (Haz.)	B or C.
Cork, ground, wet, and insecurely packed	Not accepted.
Cork, ground, or granulated, dry (Haz.)	B or C.
Cotton (Haz.)	E, C, or E. See par. W70.
Cotton wadding (Haz.)	B, C, or E. See par. W70.
Cotton waste (textile waste, waste wool, cotton sweepings, felt waste) when dry, clean, may contain 5% or less of animal or vegetable oil. When containing more than 5% of animal or vegetable oil shall not be offered for transportation (Haz.)	do.
Cotton waste, oily with more than 5% of animal or vegetable oil	B.
Cotton, wet (Haz.)	B or C.
Creosote or creosote oil (Haz.)	B or E, keep away from foodstuffs.
Cresol (cresylic acid) (Comb. L.)	do.
Crude nitrogen fertilizer solution	B, keep cool.
Crude oil (petroleum crude) (Comb. L.)	Freight vessels, B or E, passenger vessels, A or B.
Cyanide of calcium, solid	C or D, keep dry. Separate from foodstuffs.
Cyclopropane (liquefied petroleum gas)	B, keep cool.
Decahydronaphthalene (decalin) (Comb. L.)	B or E.
Dichloroethylene	Freight vessels, B or E, passenger vessels, B.
Dimethylamine	Freight vessels, B or E, passenger vessels, B, separate from foodstuffs.
Dinitrobenzol, solid	do.
Dinitrobenzol, liquid	B or E.
Disinfectants, liquid (Comb. L.)	do.
Distillates, n. o. s., petroleum, coal tar, or wood (Comb. L.)	B or E.
Drugs, chemicals, medicines, or cosmetics, n. o. s. (Comb. L.)	B or C.
*Drugs, chemicals, medicines, or cosmetics, n. o. s. (liquid) (Pols. B.)	do.
*Drugs, chemicals, medicines, or cosmetics, n. o. s. (solid) (Pols. B.)	do.
Essential oils (Haz.)	do.
Ethyl butyl acetate (Comb. L.)	E.
Ethyl benzene (ethyl benzol) (Comb. L.)	B or E.
Ethyl butyrate (Comb. L.)	do.
Ethylchlorarsine	Freight vessels, B.

(Add or Amend) Recommended Stowage of Explosives and Other Dangerous Articles—Continued

(Add or Amend) Recommended Stowage of Explosives and Other Dangerous Articles—Continued

Article	Stowage	Article	Stowage
Ethyl lactate (Comb. L.)	B or E.	Mercuric (mercury nucleate), solid	Separate from foodstuffs.
Ethyl methyl ether	Freight vessels, B or E, passenger vessels, A or B.	Mercurous bromide, solid	do.
Ethyl nitrate (nitric ether)	do.	Mercurous gluconate, solid	do.
Ethyl nitrite (nitrous ether)	Freight or passenger vessels, drums only, A; metal cans or bottles, boxed, B or C, keep cool.	Mercurous iodide, solid	do.
Explosive compositions	Freight vessels, explosives restrictions, magazines, C or D, separate from foodstuffs.	Mercurous nitrate, solid	do.
Ferric arsenate, solid	do.	Mercurous oxide, black, solid	do.
Ferric arsenite, solid	No restrictions.	Mercurous sulfate, solid	do.
Ferrous arsenite (iron arsenate), solid	C or D, separate from foodstuffs.	Mercury acetate, solid	do.
Fiberboard scrap (Haz.)	E.	Mercury bisulfate, solid	do.
Fish scrap or fish meal containing less than 6 percent or more than 12 percent moisture.	C, keep cool.	Mercury compounds, n. o. s. (solid)	do.
Flax (Haz.)	C, keep cool.	Mercury cyanide, solid	do.
Fuel oil (Comb. L.)	A or E.	Methano	A or B, keep cool.
Fumigants. (See sec. 163 (a) Note.)	A or E.	Methyl amyl acetate (Comb. L.)	B or E.
Furfural (Comb. L.)	Freight vessels, B, keep cool.	Methyl amyl alcohol (Comb. L.)	B or E.
Garbage tankage containing less than 8 percent of moisture.	Freight vessels, A or B.	Methyl bromide, liquid, (bromomethane)	B or E.
Hair, wet	Freight vessels, A or B.	Methyldichlorarsine	Freight vessels, A.
Hazardous articles, n. o. s. (Haz.)	E.	Methyl formate	Freight vessels, A or B.
Hydrochloric acid mixtures	A or B.	Monochloroacetone, stabilized	Freight vessels, B or E, passenger vessels, A.
Hydrocyanic acid (prussic), unstabilized	Not accepted.	Motion-picture film, nitrocellulose base, including mixed shipments with nonflammable film.	Freight vessels, B or E, passenger vessels, A.
Hydrocyanic acid solutions	Separate from foodstuffs. Ventilation required.	Motion-picture film scrap (nitrocellulose), samples of.	O, keep cool.
Hydrofluoric acid, anhydrous	Freight vessels, A.	Motion-picture film toy pieces (nitrocellulose)	do.
Initiating explosive	Freight vessels, B or E, passenger vessels, B.	Motion-picture film, unexposed (nitrocellulose)	do.
Ink	D.	Naphthalene, solvent	Freight vessels, A, B, or E, passenger vessels, A.
Iron nails (Haz.)	B or E.	Naphthalene (crude and refined) (Haz.)	E, separate from foodstuffs.
Lacquer enamel (Comb. L.)	Separate from foodstuffs.	Naphthalens (coal tar camphor) (Haz.) (moth balls)	do.
Lead acetate, solid	do.	Neon gas	D, keep cool.
Lead cyanide. (See sec. 307.)	Separate from foodstuffs.	Nickel cyanide, solid	Separate from foodstuffs.
Lewisite	Freight vessels, A.	Nicotina hydrochloride	do.
Light oils (Comb. L.)	B or E.	Nicotina, liquid	do.
London purple, solid	Separate from foodstuffs.	Nicotina salicylate	do.
Magnesium arsenate, solid	do.	Nicotina sulfate, solid	do.
Magnesium nitrate	E, keep dry and separate from acids and combustible material.	Nicotina tartrate	do.
Magnesium perchlorate	E, separate from acids.	Nitrate of aluminum	E, keep dry and separate from acids and combustible material.
Manganese dioxide (Haz.)	D.	Nitrate of ammonia explosives. See High explosives, n. o. s.	do.
Manila (Haz.)	B, D, or E.	Nitrochlorobenzene, ortho, liquid	do.
Matches, black. See Strike-anywhere matches.	Freight vessels, E, passenger vessels, B.	Nitrochlorobenzene, meta or para, solid	A or B.
Mercuric acetate	Not regulated.	Nitrogen dioxide, liquid	Separate from foodstuffs.
Mercuric ammonium chloride, solid	Separate from foodstuffs.	Nitrogen peroxide (tetroside)	Freight vessels, A.
Mercuric benzoate, solid	do.	Nitrosyl chloride	do.
Mercuric bromide, solid	do.	Nitrosyl chloride	D, keep cool.
Mercuric cyanide, solid	do.	Oil cake (Haz.)	O.
Mercuric iodide, solid	do.	Oil scrap, paper, or textile (Haz.)	O.
Mercuric iodide solution	do.	Oiled textiles and oiled paper; oiled clothing, painted cloth, canvas, etc., waterproofed cloth, canvas, oiled, painted or varnished paper, oiled cloth (Haz.)	O.
Mercuric oxide (red), solid	do.	Oxidizing materials with other articles—fumigants. (See sec. 163 (a).)	O.
Mercuric oxide (yellow), solid	do.	Paper scrap not baled	Not accepted.
Mercuric oxyvanate, solid	do.	Paper scrap tightly baled (Haz.)	E. See par W70.
Mercuric-potassium cyanide, solid	do.	Paraldehyde (Comb. L.)	B or E.
Mercuric-potassium iodide, solid	do.	Picramidinone, solid	Separate from foodstuffs.
Mercuric salicylate, solid	do.	Picrates, n. o. s.	E, separate from acids.
Mercuric subsulfate, solid	do.	Picric acid in excess of 75% (See sec. 309.)	Freight vessels, A.
Mercuric sulfate, solid	do.		
Mercuricyanamid, solid	do.		
Mercuric sulfo cyanate, solid	do.		

(Add or Amend) Recommended Stowage of Explosives and Other Dangerous Articles—Continued

Article	Stowage
Pernmanganate of soda.....	Freight vessels B or D, passenger vessels in glass or metal, boxed, D.
Pernmanganates, n. o. s.....	do.
Pharmaceutical preparations. See Drugs, chemicals, medicines, or cosmetics n. o. s.	
Phenylcarbylamine chloride.....	Freight vessels, A
Phenyldichlorarsine, liquid.....	Freight vessels, A or B, passenger vessels, A.
Phosgene (diphosgene).....	Freight vessels, A.
Photographic flash lamps (Haz.).....	D
Picric acid, wet, not exceeding 16 ounces. (See sec. 192.)	
Pine oil (Comb. L.).....	B or E.
Polishes (Comb. L.).....	do.
Potassium arsenate, solid.....	Separate from foodstuffs.
Potassium arsenite, solid.....	do.
Potassium peroxide.....	E, separate from acids and combustible material.
Potato spray (arsenical), liquid. See *Insecticide, liquid.	
Powdered aluminum (Haz.).....	D.
Propylene chlorohydrin (Comb. L.).....	B or E.
Quick lime (Haz.).....	D, keep dry.
Rags, oily.....	B or E.
Rags, scrap, baled (Haz.).....	B or E. See par. W70.
Rags, scrap, loose.....	Not accepted.
*Road asphalt or tar, liquid.....	Freight vessels, B or E, passenger vessels, A.
Road oil (Comb. L.).....	B or E.
Rosin, colophony, pine rosin (Haz.).....	C or E.
Rough ammoniate tankages.....	D or E.
Samples, explosives. (See sec. 52)	
Samples, new explosives. (See sec. 52.)	
Scheele's green. See Copper arsenite.	
Scrap, treated, textiles, or paper (Haz.).....	C or E.
Sea island cotton. See Cotton.	
Shavings, wood (Haz.).....	do.
Shellac, raw, stick lac (Haz.).....	C or D.
Sludge acid.....	A or B.
Sodium permanganate.....	E, keep dry and separate from acids and combustible material.
Solvents, n. o. s. (Comb. L.).....	B or E.
Spent mixed acid.....	Freight vessels, A.
Spent sulfuric acid.....	A or B.
Stain. See *Paint, enamel, lacquer, stain, shellac, varnish, etc.	
Stores, ship or vessels. (See sec. I.)	
Strontium arsenite, solid.....	Separate from foodstuffs.
Strontium chlorate.....	E, keep dry and separate from acids and combustible material.
Strontium chlorate, wet.....	do.
Strychnine and salts thereof, solid.....	Separate from foodstuffs.
Tank cars, gas (must not contain gases that combine chemically). (See sec. 303 (b).)	
*Tar, liquid.....	Freight vessels, B or E, passenger vessels, A.
Tetryl. (See High explosives.)	
Textiles, oiled, treated. (Haz.).....	B, C, or E.
*Thallium salts, solid.....	E; separate from foodstuffs.
Toilet preparations. (See Drugs, chemicals, medicines and cosmetics, n. o. s.)	
Torches. See Fireworks.	
Torpedoes, empty. (See sec. 56.)	
Toy caps.....	C.
Trinitrobenzene, wet (not to exceed 16 ounces).	D.
Trinitrotoluene, wet (not to exceed 16 ounces).	D.
Type dross. (See Lead dross.)	
Very signal cartridges. (See Fireworks.)	
Waste, cotton, wet. (Haz.).....	B or C.
Waxes (Comb. L.).....	B or E.
X-ray film (nitrocellulose base).....	C, keep cool.
X-ray film slow-burning. (See sec. 181 (b).)	
X-ray film scrap (nitrocellulose base) other than samples.	
X-ray film scrap (slow-burning). (See sec. 181 (c).)	Freight vessels, B, keep cool.
Zinc ammonium nitrate.....	Freight vessels, B or D.
Zinc arsenate.....	Separate from foodstuffs.
Zinc arsenite, solid.....	do.
Zinc chlorate.....	Freight vessels, B or D, separate from acids and ammonium salts, passenger vessels, in glass or metal, boxed, D.
Zinc cyanide. (See sec. 357.)	
Zinc ethyl.....	Freight vessels, A.
Zinc nitrate.....	E, keep dry and separate from acids and combustible material.
Zinc permanganate.....	Freight vessels, B or D, passenger vessels in glass or metal, boxed, D.
Zirconium picramate, wet with 20% of water.	Freight vessels, B.

It is further ordered, That compliance with the aforesaid amendments made effective by this order is hereby authorized on and after the date of approval and publication thereof;

And it is further ordered, That copies of this order be served upon all the parties of record herein, and that notice to the public be given by posting in the office of the secretary of the Commission at Washington, D. C.

By the Commission, division 3.

[SEAL]

W. P. BARTEL,
Secretary.

[F. R. Doc. 40-5394; Filed, December 6, 1940; 10:03 a. m.]

[No. 3666]

REGULATIONS FOR TRANSPORTATION OF EXPLOSIVES AND OTHER DANGEROUS ARTICLES

At a Session of the Interstate Commerce Commission, Division 3, held at its office in Washington, D. C., on the 16th day of August, A. D. 1940

It appearing, That pursuant to section 233 of the Transportation of Explosives Act approved March 4, 1921 (41 Stat. 1445), the Commission has formulated and published certain regulations for the transportation of explosives and other dangerous articles applying to common carriers engaged in interstate or foreign commerce, by land or water, in freight, express, or baggage services by rail, or by water, or highway;

It further appearing, That by public notice dated July 6, 1940, the Commission entered upon a hearing concerning the propriety of publishing certain suggested changes and modifications in the aforesaid regulations;

And it further appearing, That a full investigation of the matters and things involved has been had, and the Division having found that such regulations are in accord with the best-known practicable means for securing safety in transit, covering the packing, marking, loading, handling while in transit, and the precautions necessary to determine whether the material when offered is in proper condition to transport, and good cause appearing therefor:

It is ordered, That the aforesaid regulations, and the suggested changes and modifications thereof, included herein and made a part hereof, be and they are hereby promulgated and published by the Commission as required by said act, effective January 7, 1941, and shall cancel and supersede regulations effective October 1, 1930, and amendments thereto, insofar as those regulations remain in force on the effective date hereof, also outstanding authorities for fusion-welded test tanks for tank cars, insofar as they apply to cars not already constructed or under construction on the effective date hereof, also orders of December 28, 1939,

and March 29, 1940, in Special Series A, insofar as these orders authorize common carriers by water to accept and transport fusion-welded tanks of special design and construction containing commercial butane; but not including order of November 5, 1931, approving the use of special combination flat and tank car, or order of September 4, 1935, amended October 29, 1938, approving the use in test service of tank car with fusion-welded, glass-lined tanks for sulphuric acid, and said regulations shall remain in full force and be observed until further order of the Commission;

It is further ordered, That compliance with the aforesaid regulations, and the suggested changes and modifications thereof, made effective by this order, is hereby authorized on and after the date of approval and publication thereof: *Provided*, That specifications for tanks of tank cars shall be effective on the specific date shown therein;

And it is further ordered, That copies of this order be served upon all the parties of record herein, and that notice to the public be given by posting in the office of the secretary of the Commission at Washington, D. C.

By the Commission, division 3.

[SEAL]

W. P. BARTEL,
Secretary.

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PART 1—GENERAL INFORMATION AND REGULATIONS

A PLAN OF THE REGULATIONS

(1) Regulations herein cover preparation of explosives and other dangerous articles for transportation by common carriers by rail freight, rail express, rail baggage, highway or water, construction of containers, packing, weight, marking, labeling when required, billing, and shipper's certificate of compliance with these regulations; also cars, loading, storage, billing, placarding, and movement thereof by carriers by rail.

(2) Construction, equipment, loading, storage, billing, marking, and operation of motor vehicles on the highways are published in separate issue of the Commission.

B ACT OF CONGRESS

(1) Section 235 of the act of March 4, 1921, requires the shipper of explosives and other dangerous articles to describe, pack, and mark his packages properly, and to inform the agent of the carrier of the true character of their contents. Heavy penalties are provided for the shipper who knowingly solicits the transportation of any explosive or other dangerous article without complying with these requirements, as well as for the carrier that knowingly accepts and transports them.

(2) No person may, under any circumstances, offer any shipment of explosives for transportation on any passenger vessel, car, or vehicle, in violation of section 232 of the act of March 4, 1921. No person or carrier may accept for shipment by rail or so transport any explosives or other dangerous articles as defined herein pursuant to section 233 of the act, on any railroad car before writ-

ten notice of the true character of the article is given the carrier, without being subject to the penalties of the act.

C CHANGES IN THE REGULATIONS

Shippers and Carriers by Rail

(1) Changes in and additions to the regulations usually result from new information or altered conditions, and proposals will be considered by the Commission, upon its own motion or upon informal request made by any interested party. Under the Transportation of Explosives Act, the services of the bureau for the safe transportation of explosives and other dangerous articles, hereinafter called Bureau of Explosives, may be utilized by the Commission in the execution of its provisions. This Bureau will make inspections and conduct investigations and will confer with manufacturers and shippers with a view to determining what regulations will within reasonable limits afford the highest degree of safety in preparing and packing explosives and other dangerous articles for transportation by carriers by rail, highway, or water. The Commission will give due weight to the expert opinions thus obtained. Reports of these investigations will be made to the Commission with recommendations.

(2) Specifications for shipping containers, methods of packing for shipment, and other regulations will be considered and prescribed from time to time by orders effective as conditions may appear to warrant.

Motor Carriers

(3) Application for approval of regulations containing authority to construct or operate new or improved types of tank motor vehicles, cargo tanks and tank containers, or to make other changes in regulations for the operation of motor vehicles, shall be made in accordance with the procedure prescribed in the Motor Carrier Safety Regulations, Revised, Part 7.

D CHANGES IN TANK-CAR SPECIFICATIONS

Proposals of changes in or additions to specifications for tanks to be mounted on or to form part of a car and to be classified as tank cars should be submitted to the secretary, mechanical division, Association of American Railroads, for thorough investigation and consideration by its committee on tank cars, that committee to report its recommendations, together with objections offered to its proposals, with explanations and reasons for desired approval thereof, through said secretary to the Commission, and such reports may be submitted to the Bureau of Explosives, as circumstances appear to warrant, for comments and suggestions before appropriate action by the Commission.

E PROCEDURE COVERING TANK-CAR CONSTRUCTION

(1) Complete detailed prints of new or improved types of tank-car tanks and detailed prints or samples of new or improved types of equipment therefor should be submitted to the secretary, mechanical division, Association of American Railroads, for thorough investigation and laboratory tests of samples by its committee on tank cars.

(2) When in the opinion of the committee such tanks or equipment therefor are in full compliance with effective specifications of the Commission and no increase in hazard is involved, their use should be permitted.

(3) When in the opinion of the committee such tanks or equipment therefor are in full compliance with effective specifications of the Commission and a possible increase in hazard is involved, service trials should be agreed upon among interested parties before more extended use is permitted.

(4) When in the opinion of the committee such tanks or equipment therefor do not comply with effective specifications of the Commission and service trials are desirable, approval by the Commission of the conditions of such trials must be obtained.

(5) Prompt reports of the tank car committee on these matters should be made to the Commission through said mechanical division secretary and should include objections to proposed modifications of the specifications and advice of any extensions of pending investigations found necessary. The committee's expert opinions thus obtained will be given due weight by the Commission in determining upon appropriate final action to be taken. The merits of controversies arising under the foregoing procedure will be considered and changes in or additions to the specifications or authorizations of service trials, will be made by the Commission as conditions appear to warrant.

F APPROVED CHANGES—NOTICE

The Transportation of Explosives Act requires that notice of 90 days after formulation and publication should be given of the effective date of new or modified regulations, unless shorter time is authorized by the Commission. The authority to establish amended regulations upon less than 90 days' notice will be exercised only in instances where special and peculiar circumstances or conditions fully justify it.

G PUBLIC HEARINGS

Public hearings concerning regulations contained herein will be held by the Commission at sufficiently frequent intervals. At these hearings evidence may be introduced in favor of proposed changes or additions and protest against the adoption thereof will also be heard. Final action also may be taken by the Commission without hearing, following 20 days' notice by the Commission of proposed changes or additions, or without such notice, as conditions appear to warrant.

H DEFINITIONS

(1) The word "*must*" or "*shall*" is used herein in mandatory regulations. The word "*should*" indicates recommendatory provisions.

(2) In section 232 of the Transportation of Explosives Act it is provided that it shall be unlawful to transport certain explosives on any car or vehicle of any description operated in the transportation of passengers by a common carrier engaged in interstate or foreign commerce, which car or vehicle is carrying passengers for hire. It is further provided that certain explosives may, under limited conditions, be transported on such car or vehicle. The term "car or vehicle of any description, operated in the transportation of passengers * * * for hire" as used herein, means any railroad car of a passenger train, or highway vehicle, with passengers for hire in the same such railroad car or highway vehicle.

(3) Whenever use of a container type is prescribed in the packing regulations but without specification number, the authorized type of container, either specification or nonspecification, may be used for the shipment.

I VESSELS STORES

Vessels stores are regulated by the regulations of the Bureau of Marine Inspection and Navigation of the Department of Commerce and are not included herein.

J INFLAMMABLE OR COMBUSTIBLE LIQUIDS IN BULK

Nothing in these regulations shall be construed as affecting the transportation of inflammable or combustible liquids in bulk on board vessels which transportation is governed by the rules and regulations promulgated under section 4417 (a) —46 U. S. C. 391 a.

K TRANSPORTATION BY MOTOR CARRIERS BY HIGHWAY

For regulations governing the transportation of explosives and other dangerous articles by motor vehicle on highways, see Motor Carrier Safety Regulations, Revised, Part 7.

Until further order of the Commission inflammable liquids, corrosive liquids, compressed petroleum gases, and poisonous liquids class B, may be offered for transportation by tank motor vehicle authorized in Motor Carrier Safety Regulations, Revised, Part 7, when regulations herein authorize transportation in tank cars.

L TRANSPORTATION BY CARRIERS BY WATER

When the transportation of a shipment involves movement by carrier by water, the applicable provisions of these regulations must be observed by the shipper.

M EXPORT SHIPMENTS VIA DOMESTIC CARRIERS

Explosives or other dangerous articles authorized to be exported from the United States when packed, marked, labeled, and described, in accordance with rules and regulations in force at destination ports, must not be offered to any common carrier for domestic transportation unless in full accordance with regulations applying to domestic shipments of the same articles subject to these regulations.

PART 2—COMMODITY LIST OF EXPLOSIVES AND OTHER DANGEROUS ARTICLES CONTAINING THE SHIPPING NAME OR DESCRIPTION OF ALL ARTICLES SUBJECT TO THESE REGULATIONS

1. The proper shipping name which must be used and shown on outside shipping containers appears in roman type (not *italics*).

2. For an article not described by name shown in this commodity list, when such article is classified as a dangerous article by sections 100, 140, 150, 151, 240, 300, 326, 336, 350, 362, or 375, the article must be prepared and offered for shipment in compliance with the regulations for the group within which it is properly classified.

3. The commodity list also shows the kind of label when required on shipments of explosives and other dangerous articles and the articles which are prohibited for transportation.

List of Explosives and Other Dangerous Articles—Continued

*Indicates that articles may or may not be classed as inflammable liquids, inflammable solids, compressed gases, poisons, or corrosive liquids by these regulations. If so classed such articles are subject to the regulations prescribed for articles within these definitions.
 Inf. L.—Inflammable Liquid.
 Inf. S.—Inflammable Solid.
 Oxy. M.—Oxidizing Material.
 Cor. L.—Corrosive Liquid.
 Noninf. G.—Noninflammable Compressed Gas.
 Inf. G.—Inflammable Compressed Gas.
 Pcls. A.—Poison Gas or Liquid, Class A.
 Pcls. B.—Poisonous Liquid or Solid, Class B.
 Tear G.—Tear Gas, Class C.
 Expl. A.—Class A Explosives.
 Expl. B.—Class B Explosives.
 Expl. C.—Class C Explosives.
 Not accepted—Means not to be offered or accepted for transportation.
 Forbidden—Means prohibited by law.

Article	Classed as—	Exemptions and packing (see sec.)	Label required if not exempt	Maximum quantity in one outside package by rail express
Acetaldehyde (ethyl aldehyde).....	Inf. L.....	103, 110.....	Red.....	10 gallons.
Acetone.....	do.....	103, 110.....	do.....	Do.
Acetone oils.....	do.....	103, 110.....	do.....	Do.
Acetyl chloride.....	Cor. L.....	244, 249.....	White.....	1 gallon.
Acetylene.....	Inf. G.....	322, 323 (C).....	Red.....	250 pounds.
Acid carboxylic, empty.....	See sec. 23 (C).....			
Acids, liquid, n. o. s.....	Cor. L.....	244, 249.....	White.....	5 pints.
Acid picric.....				
Acid stearic.....	Pcls. A.....	No exemption 533.....	Poison gas.....	Not accepted.
Acidic sludge.....	Inf. L.....	103, 110.....	Red.....	10 gallons.
Acrylonitrile.....	Noninf. G.....	322, 323.....	Green.....	250 pounds.
Aeropyrene (arsol).....	Pcls. B.....	323, 349.....	Poison.....	10 gallons.
Air, compressed.....				
Alcohol or alcohol, n. o. s.....				
Alcohol, allyl, liquid.....	Inf. L.....	103, 110.....	Red.....	10 gallons.
Alcohol, butyl, See Alcohol or alcohol, n. o. s.....				
Alcohol, denatured, See Alcohol or alcohol, n. o. s.....				
Alcohol, ethyl, See Alcohol or alcohol, n. o. s.....				
Alcohol, propyl, See Alcohol or alcohol, n. o. s.....				
Alcohol, tetrahydro, See Alcohol or alcohol, n. o. s.....				
Alcohol, wood (methanol), See Alcohol or alcohol, n. o. s.....				
Alkaline corrosive battery fluid.....				
Alkaline corrosive battery fluid with storage battery.....				
Allyl alcohol, n. o. s.....	Cor. L.....	244, 249.....	White.....	Do.
Allyl alcohol, See Alcohol, allyl, liquid.....				
Aluminum liquid (or paint), See Aluminum nitrate.....				
Aluminum nitrate, See Nitrate of aluminum.....				
Aluminum nitrate, See Nitrate of aluminum.....				
Ammonia, anhydrous, See Anhydrous ammonia.....				
Ammonium arsenate, solid.....	Pcls. B.....	322, 323.....	Poison.....	200 pounds.
Ammonium bicarbonate.....	Oxy. M.....	163, 173.....	Yellow.....	100 pounds.
Ammonium nitrate.....	do.....	163, 169, 183.....	do.....	Do.
Ammonium perchlorate.....	do.....	163, 173.....	do.....	Do.
Ammonium permanganate.....	do.....	163, 173.....	do.....	Do.
Ammonium picrate, See High explosives.....				

List of Explosives and Other Dangerous Articles

Article	Classed as—	Exemptions and packing (see sec.)	Label required if not exempt	Maximum quantity in one outside package by rail express
Ammonium picrate, wet, (not to exceed 16 ounces).....	See sec. 102.....			
Ammonium, chemical (containing class A poisons, liquids, or gases), See Chemical ammonium.....				
Ammonium, chemical (containing class B poisons, liquids, or gases), See Chemical ammonium.....				
Ammonium, chemical (containing class C poisons, liquids, or solids), See Chemical ammonium.....				
Ammonium, chemical, explosives.....	See sec. 52.....			
Ammonium for cannon, n. o. s.....	See sec. 56.....			
Ammonium for cannon with empty projectiles.....	Expl. B.....	No exemption 63.....		Not accepted.
Ammonium for cannon with empty projectiles, gas, smoke, or incendiary projectiles.....	Expl. A.....	No exemption 65.....	See sec. 55.....	Do.
Ammonium for cannon with empty projectiles.....	Expl. B.....	No exemption 63.....		Do.
Ammonium for cannon with cold projectiles.....	do.....	do.....		Do.
Ammonium for cannon without projectiles.....	do.....	do.....		Do.
Ammonium small-arms, See Small-arms ammunition.....				
Ammonium for small-arms with explosive bullets.....	Expl. A.....	No exemption 63.....		Do.
Ammonium material.....	See sec. 53.....			
Amyl acetate.....	Inf. L.....	103, 110.....	Red.....	10 gallons.
Amyl nitrate.....	do.....	103, 110.....	do.....	Do.
Anhydrous ammonia.....	Noninf. G.....	322, 323.....	Green.....	250 pounds.
Anhydrous hydrochloric acid, See Hydrochloric acid, anhydrous.....				
Aniline oil, empty.....	See sec. 339.....			
Antifreeze compounds, liquid.....	Pcls. B.....	323, 329.....	Poison.....	10 gallons.
Antimony compounds.....	Inf. L.....	103, 110.....	Red.....	10 gallons.
Apparatus, See Refrigerating apparatus, comp. gas or inf. liquid.....				
Arsenic.....	Noninf. G.....	322, 323.....	Green.....	250 pounds.
Arsenic acid, liquid.....	Pcls. B.....	323, 340.....	Poison.....	25 gallons.
Arsenic acid, solid.....	do.....	323, 343.....	do.....	Do.
Arsenic bromide, solid.....	do.....	322, 321.....	do.....	Do.
Arsenic chloride (arsenous), liquid.....	do.....	323, 340.....	do.....	Do.
Arsenic iodide, solid.....	do.....	322, 321.....	do.....	Do.
Arsenic pentoxide, solid.....	do.....	322, 321.....	do.....	Do.
Arsenic sulfide (gray), solid.....	do.....	322, 321.....	do.....	Do.
Arsenic trichloride, liquid.....	do.....	323, 340.....	do.....	Do.
Arsenic trioxide, solid (arsenic white), solid, arsenous acid, solid.....	do.....	322, 321.....	do.....	Do.
Arsenic compounds or mixtures, n. o. s.....	do.....	322, 324.....	do.....	Do.
Arsenical dip, liquid (scoop dip).....	do.....	323, 340.....	do.....	Do.
Arsenical dust.....	do.....	322, 325.....	do.....	Do.
Arsenical fine dust.....	do.....	322, 324.....	do.....	Do.
Arsenous acid, solid.....	do.....	322, 321.....	do.....	Do.
Arsenous acid, liquid.....	do.....	323, 340.....	do.....	Do.
Arsenic iodide solution.....	do.....	322, 321.....	do.....	Do.
Asphalt, cut-back, See Road asphalt or tar, liquid.....				
Automobiles, motorcycles, tractors or other self-propelled vehicles.....	Inf. L.....	105.....	None.....	No limit.
Automobiles, motorcycles, tractors or other self-propelled vehicles with charged electric storage batteries.....	Cor. L.....	250, 377.....	None.....	Do.
Bags, nitrate of soda, empty and unwashed.....	Inf. S.....	No exemption 165.....	Yellow.....	25 pounds.
Barium chlorate.....	Oxy. M.....	163, 169.....	do.....	100 pounds.

List of Explosives and Other Dangerous Articles—Continued

List of Explosives and Other Dangerous Articles—Continued

Article	Classed as—	Exemptions and packing (see sec.)	Label required if not exempt	Maximum quantity in one outside package by rail express
Barium chlorate, wet.	Oxy. M.	153, 163 (g).	Yellow.	200 pounds.
Barium cyanide, solid.	Pols. B.	357.	Poison.	Do.
Barium nitrate.	Oxy. M.	153, 182, 183.	Yellow.	100 pounds.
Barium perchlorate.	do.	153, 173.	do.	Do.
Barium permanganate.	do.	153, 173.	do.	Do.
Barium peroxide (binoxide, dioxide).	do.	153, 156.	do.	Do.
Barrels, empty, See Drums, empty.				
Batteries, dry.	Not regulated.			
Batteries, electric storage, wet, with automobiles or auto parts.	Cor. L.	250, 260, 377.	White.	No limit.
Batteries, electric storage, wet, with containers of corrosive battery fluid.	do.	No exemption 263.	do.	2 gallons.
Batteries, electric storage, wet.	do.		do.	
Battery charger, with electrolyte (acid), or alkaline corrosive liquid.	do.	245 (c), 260.	do.	400 pounds.
Battery fluid, See Electrolyte (acid) or Alkaline corrosive battery fluid.	do.	No exemption 259.	do.	3 quarts.
Benzene (benzol).	Inf. L.	103, 110.	Red.	10 gallons.
do.	do.	103, 110.	do.	Do.
Benzol (benzene).	do.	103, 110.	do.	Do.
Benzoyl chloride.	Cor. L.	244, 247.	White.	1 quart.
Benzoyl peroxide.	Inf. S.	No exemption 157, 168.	Yellow.	25 pounds.
do.	do.	244, 247.	White.	1 quart.
Benzyl chloride.	Cor. L.			
Black blasting powder, See Black powder.				
Black pellet powder, See Black powder.				
Black powder igniters with empty cartridge bags.	Expl. A.	No exemption 60.		Not accepted.
Black powder, See Black powder.	Expl. O.	No exemption 70.		150 pounds.
Black rifle powder, See Black powder.				
Blasting caps—1,000 or less.	do.	No exemption 62 (f).		Not accepted.
Blasting caps—more than 1,000 or less caps.	Expl. A.	do.		Do.
Blasting caps with safety fuse—1,000 or less caps.	Expl. O.	No exemption 62 (c).		Do.
Blasting caps, electric, See Electric blasting caps.				
Blasting caps, See High explosives.				
Blasting powder, See Black powder.				
Bombs, explosive, See Explosive bomb.				
Bombs, explosive, gas, smoke, or incendiary, See Explosive bomb.				
Bombs, fireworks, See Fireworks.				
Bombs, gas, smoke, or incendiary, nonexplosive, See Chemical ammunition.				
Bombs, sand-loaded or empty.	See sec. 66.			
Boosters (explosive).	Expl. A.	No exemption 62 (f).		Do.
Bordeaux arsenites, liquid.	Pols. B.	333, 349.	Poison.	55 gallons.
Boron trichloride.	do.	352, 361.	do.	200 pounds.
Boron trifluoride.	Cor. L.	No exemption 251.	White.	1 quart.
Bottles, acid or other corrosive liquids, empty.	Noninf. G.	302, 303.	Green.	300 pounds.
Box toe gun.	Inf. L.	103, 110.	Red.	10 gallons.
Boxes, reused.	See sec. 23.			
Bromacetone, liquid.	Pols. A.	No exemption 328.	Poison.	Not accepted.
Brombenzyl cyanide, liquid.	Pols. C.	No exemption 363.	Tear gas.	20 pounds.
Bromine.	Cor. L.	No exemption 252.	White.	1 quart.
Bronze liquid (or paint), See Paint, enamel, lacquer, stain, shellac, varnish, etc.				
Brucine, solid (dimethoxy strychnine).	Pols. B.	352, 361.	Poison.	200 pounds.
Burnt cotton (not replicated).	Inf. S.	No exemption 169.	Yellow.	Not accepted.
Burnt fiber.	do.	No exemption 163.	do.	Do.
Butadiene, See Liquefied petroleum gas.				
Butane, See Liquefied petroleum gas.				

Article	Classed as—	Exemptions and packing (see sec.)	Label required if not exempt	Maximum quantity in one outside package by rail express
Butyl alcohol, See Alcohol or alcohol, n. o. s.				
Cacodylic acid, solid (dimethylarsenic acid).	Pols. B.	352, 361.	Poison.	200 pounds.
Calcium arsenate, solid.	do.	352, 354.	do.	Do.
Calcium arsenite, solid.	do.	352, 361.	do.	Do.
Calcium chlorate.	Oxy. M.	153, 163.	Yellow.	100 pounds.
Calcium chlorite.	do.	No exemption 160.	do.	Do.
Calcium cyanide, See Cyanide of calcium.				
Calcium, metallic.	Inf. S.	153, 173.	do.	Do.
Calcium nitrate.	Oxy. M.	153, 182, 183.	do.	Do.
Calcium peroxide.	do.	153, 173.	do.	Do.
Calcium permanganate.	do.	153, 173.	do.	Do.
Calcium phosphide.	Inf. S.	No exemption 161.	do.	1 pound.
Canon primers.	Expl. O.	No exemption 72.	do.	100 pounds.
Caps, blasting, See Blasting caps.				
Caps, toy, See Toy caps.				
Carbolic acid, fused solid, See Carboic acid (phenol), solid.				
Carbolic acid (phenol), liquid (liquid tar acid containing over 50% benzene phenol).	Inf. L.	103, 110.	do.	55 gallons.
Carbon bisulfide (disulfide).	Noninf. G.	302, 303.	Green.	Not accepted.
Carbon dioxide siphon bulbs.	Inf. G.	302, 303.	Red Gas.	300 pounds.
Carbon monoxide.	Inf. L.	103, 110.	Red.	100 pounds.
Carbon remover, liquid.	See sec. 20 (c).			
Carbonyl chloride, See Phosgene.				
Carboys, acid, empty.				
Carboys, empty, See Acid carboys, empty.				
Cartridge bags, empty, with black powder igniters.	Expl. O.	No exemption 70.		150 pounds.
Cartridge cases, empty, primed.	do.	No exemption 72.		Do.
Casole oil, See Gasoline and naphtha, boxed.				
Casinghead gasoline, See Gasoline.				
Casks, empty, See Drums, empty.				
Caustic potash, liquid.	Cor. L.	244, 246.	White.	10 gallons.
Caustic soda, liquid.	do.	244, 246.	do.	Do.
Cement, leather.	Inf. L.	103, 110.	Red.	12 gallons.
Cement, liquid, n. o. s.	do.	103, 110.	do.	Do.
Cement, roofing, liquid.	do.	103, 110.	do.	Do.
Cement, rubber.	do.	103, 117.	do.	Do.
Charcoal, activated.	Inf. S.	162.	Yellow #.	200 pounds.
Charcoal, animal.	do.	162.	do.	Do.
Charcoal, bone.	do.	162.	do.	Do.
Charcoal, briquettes.	do.	162.	do.	Do.
Charcoal, shell.	do.	162.	do.	Do.
Charcoal, wood, ground, crushed, granulated or pulverized.	do.	162.	do.	Do.
Charcoal, wood, lump.	do.	162.	do.	Do.
Charcoal screenings, made from "pinton" wood.	do.	162.	do.	Do.
Charcoal, wood, screenings other than "pinton" wood screenings.	do.	No exemption 162.	Yellow #.	200 pounds.
Charcoal screenings, wet.	do.		Yellow.	Not accepted.
Chemical, wet.	Not accepted.			Do.
Chemicals, n. o. s. See "Drugs, chemicals, medicines or cosmetics, n. o. s."				Do.
Chemical ammunition (containing class A poisons, liquids, or gases).	Pols. A.	No exemption 330.	Poison gas.	Do.
Chemical ammunition (containing class B poisons, liquids, or gases).	Pols. B.	333, 342.	Poison.	55 gallons.
Chemical ammunition (containing class C poisons, liquids, or solids).	Pols. C.	No exemption 334.	Tear gas.	20 pounds.
Chemical ammunition, explosive.	See sec. 59.			
Chloroacetophenone, gas, liquid, or solid.	Pols. C.	No exemption 363.	do.	Do.

#Required for rail express shipments only.

List of Explosives and Other Dangerous Articles—Continued

List of Explosives and Other Dangerous Articles—Continued

Article	Classed as—	Exemptions and packing (see sec.)	Label required if not exempt	Maximum quantity in one outside package by rail express
Electrolyte (acid), battery fluid.	Cor. L.	244, 257.	White.	5 gallons.
Electrolyte (acid), alkaline, corrosive battery fluid packed with storage batteries.	do.	No exemption 258.	do.	2 gallons.
Electrolyte (acid) or alkaline, corrosive battery fluid packed with but-tery charger or radio current sup-ply device or parts thereof.	do.	No exemption 259.	do.	3 quarts.
Empty cartridge bags—black pow-der loaders.	Expl. O.	No exemption 70.		150 pounds.
Empty cartridge cases, primed.	do.	No exemption 72.		Do.
*Enamel, See *Paint, enamel, lacquer, stain, shellac, varnish, etc.	Inf. L.	103, 110.	Red.	10 gallons.
*Eradicators, paint or grease, liquid.	Inf. G.	302, 303.	do.	300 pounds.
Ethane.	Inf. L.	103, 110.	do.	10 gallons.
Ether, ethyl (sulphuric). See Ether.	do.	103, 110.	do.	Do.
Ethyl alcohol. See Alcohol or alco-hol, n. o. s.	do.	No exemption 108.	do.	300 pounds in cylinders, 15 pounds in other con-tainers.
Ethyl aldehyde. See Acetaldehyde.	do.			
Ethyl chloride.	do.			
Ethylchlorarsine.	Pols. A.	No exemption 834.	Poison gas.	Not accepted.
Ethylene.	Inf. G.	302, 303.	Red.	300 pounds.
Ethylene dichloride.	Inf. L.	103, 110.	do.	10 gallons.
Ethylene oxide.	do.	No exemption 109.	do.	300 pounds in cylinder, 15 pounds in other con-tainers.
Ethyl methyl ether.	do.	103, 110.	do.	10 gallons.
Ethyl methyl ketone.	do.	103, 110.	do.	Do.
Ethyl nitrate (nitric ether).	do.	103, 110.	do.	Do.
Ethyl nitrite (nitrous ether).	do.	103, 110.	do.	Do.
Explosive bomb.	Expl. A.	No exemption 57.	See sec. 57.	Not accepted.
*Explosive composition.	Expl. A or B.	No exemption 50, 51, 52, 60, 61, 62, 64, 65.	do.	10 pounds.
Explosive mine.	Expl. A.	No exemption 57.	See sec. 57.	Not accepted.
Explosive propellant.	do.	do.	do.	Do.
Explosives, samples for laboratory ex-amination.	See sec. 52.			
Explosive torpedo.	Expl. A.	do.	do.	Do.
*Extracts, liquid, flavoring.	Inf. L.	103, 110.	Red.	10 gallons.
Fabrics or fibers with animal or veg-etable oil. See Fibers or fabrics with animal or vegetable oil.				
Felt waste, wet. See Waste wool, wet.				
Ferric arsenate, solid.	Pols. B.	352, 351.	Poison.	200 pounds.
Ferric arsenate, solid.	do.	352, 351.	do.	Do.
Ferric arsenate (iron arsenate), solid.	do.	352, 351.	do.	Do.
*Fertilizer ammoniating solution con-taining free ammonia.	Noninf. G.	302, 303.	Green.	300 pounds.
Fertilizer, tankage. See Garbage, tankage.				
Fiber, burnt.	Inf. S.	No exemption 169.	Yellow.	Not accepted.
Fibers or fabrics, with animal or veg-etable oil.	do.	No exemption 164 (C), 170.	do.	Do.
Film, motion-picture and toy pieces of. See Motion-picture film, toy and motion-picture film scrap.				
Firerackers. See Fireworks.				
Fireracker struts. See Fireworks.				
Fire extinguisher charges.	Cor. L.	261.	White.	1 gallon.
Fire extinguishers, hand.	Noninf. G.	302.	Green.	300 pounds.
Fireworks.	Expl. B.	No exemption 64.	Fireworks.	200 pounds.
Fish meal. See Fish scrap or fish meal.				
Fish scrap or fish meal containing less than 6 percent or more than 12 percent moisture.	Inf. S.	No exemption 154 154 (m), 171.	Yellow.	Not accepted.

List of Explosives and Other Dangerous Articles—Continued

Article	Classed as—	Exemptions and packing (see sec.)	Label required if not exempt	Maximum quantity in one outside package by rail express
Flares, aeroplanes. See Fireworks.				
Flares, signal. See Fireworks.				
Fish cartridges. See Fireworks and low explosives.				
Fish crackers. See Fireworks.				
Fish powder. See Fireworks and low explosives.				
Fish struts. See Fireworks and low explosives.				
Furniture polish. See *Polishes, liquid.				
*Furniture, stove, furniture, and wood, liquid.	Expl. O.	No exemption 70.		150 pounds.
*Furniture or wood stains, liquid.	do.	do.		Do.
See *Paint, enamel, lacquer, stain, shellac, varnish, etc.	do.	No exemption 78.		300 pounds.
Fuse lighters.	do.	No exemption 69.		150 pounds.
Fuse instantaneous. See Instanta-neous fuses.				
Fuses, detonating.	Expl. A.	No exemption 62.		Not accepted.
Fuses, fuzing.	Inf. S.	No exemption 164 (A), 208.	Yellow.	Do.
Fuses, safety. See Fireworks.				
Fuses, combination, percussion, time and tracer.	See sec. 23.	103, 110.	Red.	10 gallons.
Fuses, combination, percussion, time and tracer.	Pols. A and O.	No exemption 331.	Poison gas.	See sec. 331.
Fuzes, detonating.	Inf. L.	103, 110.	Red.	10 gallons.
Garbage tankage containing less than 8 percent of moisture.				
Gas cylinders, empty.	Inf. I.	103, 110.	do.	Do.
Gas traps, hydrocarbon.	Inf. I.	103, 110.	do.	Do.
Gas identification sets.	Inf. I.	103, 110.	do.	Do.
Gasoline.	Inf. L.	No exemption 331.	do.	Do.
Galatine dynamite. See High explo-sives.				
*Gold paint. See *Paint, enamel, lac-quer, stain, shellac, varnish, etc.				
Grenades, empty, primed.	Expl. O.	No exemption 72.		150 pounds.
Grenades, hand. See Hand grenades.				
Grenades, hand or rifle, gas, smoke or incendiary.	Expl. A.	No exemption 57.		Not accepted.
Grenades, police. See Police grenades.				
Grenades, rifle. See Rifle grenades.				
Guanyl nitrosamino guanildene hy-drazine. See Initiating explosive.				
Guanyl nitrosamino guanyl tetrazene. See Initiating explosive.				
Gun cotton. See High explosives.				
Hair, wet.	Inf. S.	No exemption 172.	Yellow.	Do.
Hand grenades.	Expl. A.	No exemption 57.		300 pounds.
Helium.	Noninf. G.	302, 303.	Green.	See sec. 52.
High explosives.	Expl. A.	No exemption 61.		
Highway signals. See Fireworks (uses).				
High wines. See Alcohol or alcohol, n. o. s.				
Hydrobromic acid.	Cor. L.	244, 246.	White.	1 gallon.
Hydrobromic acid.	do.	244, 262.	do.	Do.
Hydrocarbon gas, liquefied.	Inf. G.	302, 303.	Red.	300 pounds.
Hydrocarbon gas, nonliquefied.	do.	302, 303.	do.	Do.
Hydrochloric (muriatic) acid.	Cor. L.	244, 263.	White.	10 pints.
Hydrochloric acid mixtures.	do.	244, 263.	do.	Do.
Hydrocyanic acid (prussic), liquid, un-stabilized.	Pols. A.	No exemption 332.	Poison gas.	Not accepted.
Hydrocyanic acid (prussic), un-stabilized.	do.			
Hydrocyanic acid solutions.	Pols. B.	No exemption 344.	Poison.	24 pounds.
Hydrofluoric acid.	Cor. L.	244, 274.	White.	10 pints.
Hydrofluoric acid, anhydrous.	do.	No exemption 234.	do.	150 pounds.

List of Explosives and Other Dangerous Articles—Continued

List of Explosives and Other Dangerous Articles—Continued

Article	Classed as—	Exemptions and packing (see sec.)	Label required if not exempt	Maximum quantity in one outside package by rail express
Hydrofluosilicic acid.....	Cor. L.....	244, 265.....	White.....	10 pints.....
Hydrogen peroxide (hydrogen dioxide) containing over 7.41 percent (25-volume) H ₂ O ₂	Inf. C.....	302, 303.....	Red.....	300 pounds, 1 gallon.....
Hydrogen sulfide.....	Cor. L.....	244, 266.....	White.....	
Igniters, See Fuse lighters, Fuse Igniters, Black powder igniters, Delay electric igniters, Safety squibs, or Electric squibs, Illuminating projectiles, See Fireworks.....	Inf. C.....	302, 303.....	Red.....	300 pounds.....
Inflammable liquid, n. o. s.....	Inf. L.....	103, 110.....	do.....	10 gallons.....
Inflammable solid, n. o. s.....	Inf. S.....	103, 173.....	Yellow.....	1 pound.....
Initiating explosive.....	Expl. A.....	No exemption 62.....	do.....	Not accepted.....
Ink.....	Inf. L.....	103, 110.....	Red.....	10 gallons.....
Insecticide, dry.....	Pols. B.....	352, 361.....	Poison.....	250 pounds.....
Insecticide, liquid.....	do.....	353, 340.....	do.....	65 gallons.....
Insecticide, liquid (vermin exterminator).....	Inf. L.....	103, 110.....	Red.....	10 gallons.....
Instantaneous fuze.....	Expl. O.....	No exemption 71.....	do.....	150 pounds.....
Iron mess, spent.....	Inf. S.....	No exemption 174.....	Yellow.....	Not accepted.....
Iron sponge, spent.....	do.....	do.....	do.....	Do.....
Isobutane, See Liquefied petroleum gas.....	do.....	do.....	do.....	Do.....
Isopropanol.....	Inf. L.....	103, 110.....	Red.....	10 gallons.....
Lacquer, See Paint, enamel, lacquer, stain, shellac, varnish, etc.....	See sec. 23.....			
Lacquer base, liquid, See Paint, enamel, lacquer, stain, shellac, varnish, etc.....				
Lacquer base, or lacquer chips, dry.....	Inf. S.....	103, 176.....	Yellow.....	100 pounds.....
Lacquer base, or lacquer chips, plastic (wet with alcohol or solvent).....	Inf. L.....	103, 112.....	Red.....	25 pounds.....
Lacquer removing, reducing and thinning compounds, See Cellulose, lacquer, paint, enamel, stain, varnish, reducing, or thinning, fluid.....				
Lead acetate cold.....	Pols. B.....	352, 354.....	Poison.....	500 pounds.....
Lead acetate, cold.....	do.....	352, 351.....	do.....	Do.....
Lead azide, See Initiating explosive.....				
Lead nitrate.....	See sec. 337.....			
Lead nitrate (lead trinitrate).....				
Lead peroxide.....	Inf. L.....	103, 162, 163.....	Yellow.....	100 pounds.....
Leather dressing.....	Inf. L.....	103, 110.....	Red.....	10 gallons.....
Lewisite.....	Pols. A.....	No exemption 334.....	Poison gas.....	Not accepted.....
Liquefied carbon dioxide.....	Noninf. O.....	592, 593.....	Green.....	500 pounds.....
Liquefied hydrocarbon gas.....	Inf. O.....	592, 593.....	Red.....	Do.....
Liquefied petroleum gas.....	do.....	592, 593.....	do.....	Do.....
London purple, solid.....	Pols. B.....	352, 351.....	Poison.....	200 pounds.....
Low explosives.....	Expl. A.....	No exemption 69.....	do.....	Not accepted.....
Low blasting explosives, See Low explosives.....				
Magnesium or apparatus.....	See sec. 115 and 202.....			
Magnesium arsenate, solid.....	Pols. B.....	352, 354.....	Poison.....	200 pounds.....
Magnesium, metallic, powdered.....	Inf. S.....	103, 173.....	Yellow.....	100 pounds.....
Magnesium nitrate.....	Oxy. M.....	163, 162, 163.....	do.....	Do.....
Magnesium perchlorate.....	do.....	do.....	do.....	Do.....
Magnesium peroxide, solid.....	Inf. S.....	No exemption 170.....	do.....	20 pounds.....
Matches, black, See Strike-anywhere matches.....				
Matches, book, card, or strike-anywhere, with other articles.....	See sec. 170 (5).....			
Matches, book, card, or strike-anywhere, with other articles.....	Not regulated.....			
Matches, strike-anywhere.....	Inf. S.....	No exemption 170.....	do.....	Do.....

Article	Classed as—	Exemptions and packing (see sec.)	Label required if not exempt	Maximum quantity in one outside package by rail express
*Medicines, n. o. s., See *Drugs, chemicals, medicines, or cosmetics, n. o. s.....				
Mercuric acetate.....	Pols. B.....	352, 361.....	Poison.....	200 pounds.....
Mercuric ammonium chloride, solid.....	do.....	352, 361.....	do.....	Do.....
Mercuric benzoate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercuric bromide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercuric cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercuric iodide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercuric iodide solution.....	do.....	353, 340.....	do.....	55 gallons.....
Mercuric nitrate, solid.....	do.....	352, 361.....	do.....	200 pounds.....
Mercuric oxide (red), solid.....	do.....	352, 361.....	do.....	Do.....
Mercuric oxide (yellow), solid.....	do.....	352, 361.....	do.....	Do.....
Mercuric oxycyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercuric-potassium cyanide, solid.....	do.....	352, 367, 361.....	do.....	Do.....
Mercuric-potassium iodide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercuric salicylate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercuric sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercuric sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercuric cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercuric cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercuric perchlorate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous bromide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous chloride, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous iodide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous nitrate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous perchlorate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous perchlorate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous perchlorate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous perchlorate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous perchlorate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous perchlorate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous perchlorate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous perchlorate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous perchlorate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous perchlorate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous perchlorate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous perchlorate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous perchlorate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous perchlorate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous perchlorate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous perchlorate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous perchlorate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous perchlorate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous perchlorate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous perchlorate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous perchlorate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous perchlorate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous perchlorate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous perchlorate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous perchlorate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous sulfate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanide, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous cyanate, solid.....	do.....	352, 361.....	do.....	Do.....
Mercurous perchlorate, solid.....	do.....	352, 361.....	do.....	

List of Explosives and Other Dangerous Articles—Continued

List of Explosives and Other Dangerous Articles—Continued

Article	Classed as—	Exemptions and packing (see sec.)	Label required if not exempt	Maximum quantity in one outside package by rail express
Small-arms ammunition, small-arms ammunition, tear gas cartridges.	Expl. O.	No exemption 66.	Tear gas.	160 pounds.
Small-arms primers.	do.	do.	do.	Do.
Smoke candles, See Fireworks.	do.	No exemption 72.	do.	Do.
Smoke generators, See Chemical ammunition, Class B or C.	do.	do.	do.	Do.
Smokeless powder for cannon or small-arms in water.	Expl. B.	No exemption 65.	do.	10 pounds.
Smokeless powder for cannon or small-arms in water.	do.	do.	do.	Not accepted.
Smokeless powder for cannon or small-arms, unstable, condemned or detonated.	do.	do.	do.	Do.
Smokeless powder for small-arms.	do.	No exemption 65 (e) and (d).	do.	10 pounds.
Soda, caustic solution, See Caustic soda, liquid.	do.	do.	do.	Do.
Sodium arsenate, solid.	Pols. B.	352, 355, 361.	Poison.	200 pounds.
Sodium arsenite (solution), liquid.	do.	355, 349.	do.	55 gallons.
Sodium carbonate, solid (sodium carbonate).	do.	352, 361.	do.	200 pounds.
Sodium chlorite.	Oxy. M.	153, 163.	Yellow.	100 pounds.
Sodium chlorite.	do.	No exemption 100.	do.	Do.
Sodium cyanide, See Cyanide of sodium.	do.	do.	do.	Do.
Sodium hydrosulfite.	Inf. S.	153, 204.	do.	Do.
Sodium hydroxide solution, See Caustic soda, liquid.	do.	do.	do.	Do.
Sodium metal.	Oxy. M.	No exemption 200.	do.	1 pound.
Sodium nitrite.	do.	153, 162, 163.	do.	100 pounds.
Sodium nitro.	do.	153, 172.	do.	Do.
Sodium nitrite.	do.	153, 173.	do.	Do.
Sodium permanganate.	do.	No exemption 187.	do.	Do.
Sodium peroxide.	Inf. S.	No exemption 206.	do.	25 pounds.
Sodium picramate wet with 20% of sulfur sulfide.	do.	153, 207.	do.	300 pounds.
Sulfites, See Fireworks.	Inf. L.	103, 110.	Red.	10 gallons.
Spent iron mass, See Iron mass, spent.	do.	do.	do.	Do.
Spent iron sponge, See Iron sponge, spent.	do.	do.	do.	Do.
Spent mixed acid.	Cor. L.	No exemption 248.	White.	1 quart.
Spent sulfuric acid.	Inf. S.	No exemption 174.	Yellow.	Not accepted.
Spirits of nitrolycerin.	Cor. L.	No exemption 248.	White.	1 quart.
Spraying powder, See Black powder or smokeless powder for small arms.	Inf. L.	118.	Red.	6 quarts.
Scatter cartridges, See Fireworks.	do.	do.	do.	Do.
Scuba, electric or safety, See Electric squibs or safety squibs.	do.	do.	do.	Do.
Stain, See Paint, enamel, lacquer, stain, shellac, varnish, etc.	do.	do.	do.	Do.
Storage batteries, wet, See Batteries, storage, wet.	do.	do.	do.	Do.
Stores, ship or vessels.	See sec. I.	do.	do.	Do.
Stove polish, See Polishes, metal, stove, furniture and wood, liquid.	do.	do.	do.	Do.
Strike-anywhere matches, See Matches, strike-anywhere.	do.	do.	do.	Do.
Strike-on-box matches, See Matches, strike-on-box.	do.	do.	do.	Do.
Strontium arsenite, solid.	Pols. B.	352, 361.	Poison.	200 pounds.
Strontium chlorate, liquid.	Oxy. M.	153, 163.	Yellow.	100 pounds.
Strontium chlorate, wet.	do.	153, 163.	do.	100 pounds.
Strontium nitrate.	do.	153, 162, 153.	do.	100 pounds.
Strychnine and salts thereof, solid.	Pols. B.	352, 361.	Poison.	200 pounds.
Sulfate of lead, See Initiating explosive.	do.	do.	do.	Do.
Sulfide of sodium, See Sodium sulfide.	do.	do.	do.	Do.
Sulfide of potassium, See Potassium sulfide.	do.	do.	do.	Do.
Sulfur chloride (mono and di).	Cor. L.	No exemption 247.	White.	1 gallon.

Maximum quantity in one outside package by rail express

Label required if not exempt

Exemptions and packing (see sec.)

Classed as—

Article

Classed as—

Exemptions and packing (see sec.)

Label required if not exempt

Maximum quantity in one outside package by rail express

List of Explosives and Other Dangerous Articles—Continued

Article	Classed as—	Exemptions and packing (see sec.)	Label required if not exempt	Maximum quantity in one outside package by rail express
Waste, textile, wet.....	Int. S.....	No exemption 211.....	Yellow.....	Do.
Waste wool, wet.....	do.....	No exemption 213.....	do.....	Do.
Wet hair, See Hair, wet.				
Wet nitrocellulose (collodion cotton)—20 percent water.	do.....	153, 184.....	do.....	160 pounds.
Wet nitrocellulose (collodion cotton)—30 percent alcohol (or solvent).	Inf. L.....	103, 112.....	Red.....	25 pounds.
Wet nitroguanidine—20 percent water.	Inf. S.....	153, 184.....	Yellow.....	160 pounds.
Wet nitrostarch—20 percent water.	do.....	153, 184.....	do.....	Do.
Wet nitrostarch—30 percent alcohol (or solvent).	Inf. L.....	103, 112.....	Red.....	25 pounds.
Wet paper stock, See Paper stock, wet.				
Wet rags, See Rags, wet.				
Wet textile waste, See Waste, textile, wet.				
Wet waste paper, See Waste paper, wet.				
Wet waste wool, See Waste wool, wet.				
Wood filler, See *Paint, enamel, lacquer, stain, shellac, varnish, etc.				
Wood polish, See *Polishes, metal, stove, furniture and wood, liquid.				
Wood stain, liquid, See *Paint, enamel, lacquer, stain, shellac, varnish, etc.				
Wool waste, wet, See Waste wool, wet.				
X-ray film (nitrocellulose base).....	Inf. S.....	No exemption 177.....	Yellow.....	200 pounds.
X-ray film, slow-burning.....	See sec. 181 (b).			
X-ray film scrap (nitrocellulose base), samples of.	Inf. S.....	No exemption 195.....	do.....	25 pounds.
X-ray film scrap (nitrocellulose base) other than samples.	do.....	No exemption 195.....	do.....	Not accepted.
X-ray film scrap (slow-burning).....	See sec. 181 (c).			
X-ray film, unexposed (nitrocellulose base).	Inf. S.....	159.....	Yellow <i>l.</i>	250 pounds.
Xylol (xylene).....	Inf. L.....	103, 110.....	Red.....	10 gallons.
Xylol bromide.....	Pois. C.....	No exemption 253.....	Tear gas.....	75 pounds.
Zinc ammonium nitrite.....	Oxy. M.....	No exemption, 213A.....	Yellow.....	160 pounds.
Zinc arsenate.....	Pois. B.....	352, 361.....	Poison.....	200 pounds.
Zinc arsenate, solid.....	do.....	352, 361.....	do.....	Do.
Zinc chlorate.....	Oxy. M.....	153, 163.....	Yellow.....	100 pounds.
Zinc cyanide.....	See sec. 357.			
Zinc ethyl.....	Inf. L.....	No exemption 119.....	Red.....	Not accepted.
Zinc nitrate.....	Oxy. M.....	153, 182, 183.....	Yellow.....	100 pounds.
Zinc permanganate.....	do.....	153, 173.....	do.....	Do.
Zirconium, metallic, dry.....	Inf. S.....	No exemption 215.....	do.....	75 pounds.
Zirconium, metallic, wet or sludge.....	do.....	No exemption 214.....	do.....	150 pounds.
Zirconium picramate, wet with 20% of water.	Oxy. M.....	No exemption 216.....	do.....	25 pounds.

sives or other dangerous articles into motor vehicle, and the marking of motor vehicles, see Motor Carrier Safety Regulations, Revised, Part 7. Until further order of the Commission, inflammable liquids, corrosive liquids, compressed petroleum gases, and poisonous liquids class B may be offered for transportation by tank motor vehicle authorized in Motor Carrier Safety Regulations, Revised, Part 7, when regulations herein authorize transportation in tank cars.

13 WATER CARRIER REGULATIONS

The packing required for shipments to be offered to carriers by water is as specified herein.

14 SHIPMENTS BY RAIL EXPRESS

The packing required for shipments to be forwarded by rail express will be, unless otherwise indicated, as prescribed for shipments by rail freight, provided the quantity limitations in one outside package, as shown in commodity list, are observed.

15 SHIPMENTS AS BAGGAGE BY RAIL

For shipments of explosives and other dangerous articles acceptable as baggage by rail carriers see Part 6, Regulations Applying to Rail Carriers in Baggage Service.

16 U. S. GOVERNMENT SHIPMENTS

Shipments of explosives or other dangerous articles offered by or consigned to the War or Navy Department of the United States Government must be packed, including limitations of weight, in accordance with these regulations or as required by their regulations.

17 CANADIAN SHIPMENTS

(a) Explosives and other dangerous articles, as defined herein, which are packed, marked, labeled, and loaded, in conformity with the regulations of the Board of Transport Commissioners for Canada, may be transported from point of entry in the United States to their destination in the United States or through the United States en route to a point in Canada.

(b) Specification containers made and maintained in full compliance with corresponding specifications prescribed by the Board of Transport Commissioners for Canada in its Regulations for the Transportation of Explosives and Other Dangerous Articles by Freight, and Specifications for Shipping Containers, and marked in accordance therewith, CRC etc., may be used for shipment of explosives and other dangerous articles offered for transportation by carriers by rail freight, rail express, highway, or water.

18 IMPORT SHIPMENTS

Imported shipments of explosives and other dangerous articles offered in original packages for transportation by carriers by rail freight, rail express, high-

PART 3—REGULATIONS APPLYING TO SHIPPERS.

10 PURPOSE OF THE REGULATIONS

(a) To promote the uniform enforcement of law and to minimize the dangers to life and property incident to the transportation of explosives and other dangerous articles by common carriers engaged in interstate or foreign commerce, these regulations are prescribed to define these articles for transportation purposes, to state the precautions that must be observed by the shipper in preparing them for shipment by rail freight, rail express, rail baggage, highway, or by carrier by water. It is the duty of each such shipper to make the prescribed regulations effective and to thoroughly instruct employees in relation thereto.

(b) Explosives and other dangerous articles may be offered to carriers for transportation provided the articles are in proper condition for transportation, are as defined, and are packed, marked, labeled, described, certified, and otherwise as provided for herein for accepta-

ble articles for transportation by rail freight, rail express, rail baggage, highway, or water. Articles must be loaded and stayed according to regulations herein applying to carriers by rail. Methods of manufacture, packing, and storage, insofar as they affect safety in transportation, must be open to inspection by a duly authorized representative of the initial carrier or of the Bureau of Explosives. Shipments that do not comply with these regulations must not be offered for transportation.

11 CLASSIFICATION—DANGEROUS ARTICLES

Dangerous articles other than explosives having more than one hazardous characteristic as defined by these regulations must be classified according to the greatest hazard present.

12 MOTOR CARRIER REGULATIONS

The packing required for shipments to be forwarded by motor carrier is as specified herein.

For containers, additional to those shown in Part 3, the loading of explo-

way or water must comply with all requirements of these regulations. The importer must furnish with the order to the foreign shipper, and also to the forwarding agent at the port of entry, full and complete information as to the packing, marking, labeling, and other requirements, as prescribed herein. The forwarding agent must file with the initial carrier a properly certified shipping order or other shipping paper as prescribed herein.

19 INEFFICIENT CONTAINERS

The results of experience gained by examination of broken or leaking containers must be recorded by the Bureau of Explosives to the end that further use of any particular kind of container shown by experience to be inefficient, may be prohibited by the Commission.

20 VIOLATIONS AND ACCIDENTS TO BE REPORTED

(a) Consignees must report promptly to the Bureau of Explosives all instances of improper staying and broken, leaking, or defective containers of explosives or other dangerous articles in shipments received by them.

(b) The Bureau of Explosives, upon receipt of reports from consignees, should promptly report to the shipper full particulars covering all such cases.

PREPARATION OF ARTICLES FOR TRANSPORTATION BY CARRIERS BY RAIL FREIGHT, RAIL EXPRESS, HIGHWAY, OR WATER

21 PROHIBITED MIXED PACKING

The offering of packages of dangerous articles in outside packages containing in the same compartment interior packages the mixture of contents of which would be liable to cause a dangerous evolution of heat or gas or produce corrosive materials is prohibited for transportation by common carriers by rail freight, rail express, highway, or water, except as specified in secs. 152 (a), 242 (a), (b), and 303 (b).

22 SPECIFICATION CONTAINERS PRESCRIBED

(a) *Shipping containers*, unless otherwise provided herein, used hereafter in shipping explosives or other dangerous articles must have been made and marked in compliance with specifications prescribed herein or with specifications of the Commission in effect at date of manufacture of container.

(b) Containers that do not comply with the specifications must not be marked to indicate such compliance.

(c) Containers not specified herein, made before the effective date of these regulations and authorized for use under the regulations effective October 1, 1930, which may be continued in use, are as follows:

When these regulations call for specification numbers—	These specification containers may also be used—	
1A	1	Boxed carboy, glass or earthenware.
1B	1	Boxed carboy, lead.
1C	1	Carboy in keg, glass or earthenware.
3A	3, 25, 26	Cylinder.
3B	26	Do.
3C	7	Do.
3D	33	Do.
3E	3	Do.
4A	26	Do.
4B	26, 39	Do.
4C	7	Do.
5H	5A, lead-lined	Lead-lined metal barrel or drum.
6A	20	Metal drum.
6B	20A	Do.
6C	20B	Do.
10A	9	Wooden barrel.
10B	10	Do.
10C	10	Do.
12B	23A, 23B, 23D, 24A, 24B, 24D	Fiberboard box.
12C	23C, 24C	Do.
17C	5J	Metal drum.
17E	5E	Do.
37D	6D	Do.
37E	6E	Do.
37F	6F	Do.
37G	6G	Do.
37H	6H	Do.

(d) Metal barrels and drums manufactured previous to March 31, 1912, of not to exceed 55 gallons nominal capacity, and made of metal not lighter than 16 gage, may be continued in service after each metal barrel or drum has been subjected to and has passed a hydrostatic interior pressure test of not less than 30 pounds per square inch for at least five minutes, without bulging either head beyond the chime and without leakage of liquid contents, and after each such metal barrel or drum passing the test has been plainly and permanently marked:

Mfd. before 3-31-12
 ICC—5
 Tested _____
 (Date)

and with the date of the retest, by stamping into the metal or by means of a plate securely attached to the container.

23 CLOSURES FOR CONTAINERS

Containers must be closed for shipment as prescribed in the specifications for the container unless otherwise authorized for the particular article being shipped.

24 DESIGN OF CONTAINERS

(a) In addition to standing the tests prescribed, the design and construction of containers must be such as to prevent the occurrence in individual packages of defects that permit leakage of their contents under ordinary conditions incident to transportation.

(b) Articles for which detailed specifications for packing are not given herein must be securely packed in containers strong enough to stand, without rupture

or leakage of contents, all shocks ordinarily incident to handling during transit.

25 SPECIFICATION CONTAINERS IN OUTSIDE CONTAINERS

Outside specification shipping containers containing no explosives or corrosive liquids except as provided in secs. 258 to 261, may be shipped when tightly packed in specification boxes or barrels or in nonspecification boxes, barrels, or crates complying with governing tariffs. The outside package must be marked with the prescribed name of contents and labeled as required. Packages required by these regulations to be marked "This Side Up" must be packed in the outside package with their filling holes up, and the outside package must be marked "THIS SIDE UP." The outside container must also be marked "INSIDE PACKAGES COMPLY WITH PRESCRIBED SPECIFICATIONS" unless the specification markings on the inside packages are visible through openings in the outside package.

26 QUANTITY LIMITATIONS

When quantity limitations do not appear in the packing requirements, the permitted gross weight or capacity authorized for a container to be offered for transportation by carrier by rail freight, rail express, highway, or water is shown in the container specification. (See also sec. 27.)

27 RAIL EXPRESS LIMITATIONS

(a) Dangerous articles other than explosives, except such as are not accepted for transportation, and except where special packing is prescribed herein for rail express shipments, must, when offered for shipment by rail express, be packed, marked and labeled in compliance with these regulations.

(b) The maximum quantity of any explosive or other dangerous article that may be offered for transportation by rail express in one outside package must not exceed that as shown in the commodity list.

(c) When several dangerous articles are placed in one outside package without violating these regulations, the combined quantity of any one group must not exceed the lowest limit prescribed for any one of the articles of that group that is included.

28 REUSED CONTAINERS

(a) Containers used more than once (refilled and reshipped after having been previously emptied) must be in such condition, including closing devices and cushioning materials, that they will protect their contents during transit as efficiently as new containers. Repairs must be made in an efficient manner and parts that are weak, broken, or otherwise deteriorated must be replaced (see

sec. 28 (e), (f), (g), and (h) for containers that cannot be reused).

(b) Markings applied as prescribed by the specifications must be maintained in a legible condition.

(c) If, on account of painting or any other reason, the markings as prescribed for any container cannot be kept plain and legible, a metal plate, brazed or soldered, or otherwise securely fastened to the container, with a reproduction of the prescribed markings plainly stamped thereon, will be permitted.

(d) Containers previously used for the shipment of any explosive or other dangerous article must have old marks of contents, addresses, and labels, if any, thoroughly removed or obliterated before being used for the shipment of other articles.

(e) Boxes previously used for high explosives containing a liquid explosive ingredient must not be again used for shipments of any character.

(f) Kegs previously used for any chlorate must not be again used for shipments of any character.

(g) Metal kegs previously used for black powder not contained in an interior package must not be again used for shipment of any explosive.

(h) *Single-trip containers* made under specifications prescribed herein, from which contents have once been removed following use for shipment of any article, must not be again used as shipping containers for explosives, inflammable liquids, inflammable solids, oxidizing materials, corrosive liquids, or poisons, class B or C, as defined herein.

29 EMPTY CONTAINERS

(a) Empty cylinders, barrels, kegs, or drums, previously used for the shipment of an inflammable, poisonous, or corrosive, gas or liquid, must have their filling and vent holes properly closed before being offered for transportation.

(b) They may be loaded in open or stock cars when desired. Cars should not be placarded but lighted lanterns or other open-flame lights should be kept away.

(c) Carboys previously used for the shipment of corrosive liquids when offered to carriers for transportation as "empty" carboys must have been thoroughly (completely) drained. Whenever practicable they should not be loaded with valuable or perishable freight.

(d) Empty bottles previously used for the shipment of acids or other corrosive liquids must be securely stoppered.

(e) Containers shipped as "empty" must have the old labels prescribed by these regulations removed, obliterated, destroyed, or completely covered by a square white label measuring not less than six inches on each side and bearing thereon the word "EMPTY" in letters not less than one-inch high. This does not apply to carload or truckload shipments to be unloaded by consignee.

30 LOADING AND PLACARDING OF CARS BY SHIPPERS

When shipments of explosives or other dangerous articles are loaded into cars by shippers, the applicable provisions of Part 4 must be complied with.

31 QUALIFICATION, MAINTENANCE AND USE OF TANK CARS AND TANK MOTOR VEHICLES

(a) Tanks mounted on or forming part of a car and built in compliance with the American Railway Association's specifications for tank cars prior to July 1, 1927;

Or built in compliance with the Commission's specifications for tanks of tank cars in force prior to the effective date of these regulations, including tanks already constructed or under construction on the effective date hereof in compliance with trial specifications for fusion-welded tanks of tank cars;

Or tanks built in compliance with specifications for fusion-welded tanks of tank cars made effective herein:

All such tank cars are authorized for service, until further order of the Commission, as follows:

Where these regulations call for specification Nos.—	These specification containers may also be used—
103 ¹	A. R. A. II ^{1,2} , III ^{1,2} , and IV ^{1,2} I. C. C. 103W.
103A ⁴	A. R. A. II ^{2,3} , and III ^{2,3} , I. C. C. 103A-W.
103B ⁴	A. R. A. II ⁴ , and III ⁴ , rubber lined, I. C. C. 103B-W.
103C ⁴	I. C. C. 103C-W.
104 ⁴	A. R. A. IV ⁴ , I. C. C. 104W.
104A ⁴	I. C. C. 104A-W.
105A500	A. R. A. V ^{2,3} -I. C. C. 105 ^{2,3} , I. C. C. 105A-500W. ⁵
105A400	I. C. C. 105A400W. ⁵
105A500	I. C. C. 105A500W. ⁵
105A600	I. C. C. 105A600W. ⁵
106A500	I. C. C. 27 cylinders mounted on or forming part of a car, and classified as multi-unit tank cars prior to October 1, 1929.
106A800	None.
107A	Do.
108	Wooden tanks built and authorized prior to July 1, 1927.
108A	Do.

¹ Tank must be tested to a pressure of 60 pounds per square inch and safety valves must be set to open at a pressure of 25 pounds per square inch. Tank cars having head block anchorage must not be used for the transportation of inflammable liquids.

² Tanks and their appurtenances must have been originally designed or subsequently reconstructed for the transportation of acids.

³ Safety valves on these cars must be set to open at pressure not exceeding 225 pounds per square inch.

⁴ Tank cars equipped with safety vents must have the vent closure so chained or otherwise fastened as to prevent misplacement.

⁵ These cars must not be used for shipments of smokeless powder in water unless equipped with positive closure type bottom outlet valves.

⁶ These tank cars are not authorized for shipment of chlorine.

(b) (1) Any riveted tank car after repairs requiring extensive riveting or calking must be retested as prescribed in sec. 31 (f) before the tank is returned to service.

(b) (2) For repairs to ICC-105A and 105A-W type of tank or equipment therefor requiring welding, the owner of the tank, or party authorized by the owner, must secure approval of such repairs

from the Association of American Railroads' committee on tank cars. Calking of welded joints prohibited. Tank must be retested as prescribed in sec. 31 (f) before being returned to service. All fusion welds must be stress relieved.

(b) (3) For repairs to ICC-106A type of tank or equipment therefor requiring welding, the owner of the tank, or party authorized by the owner, must secure approval from the Association of American Railroads' committee on tank cars of such repairs, and the welding and the stress-relieving must be the same as authorized for manufacture of tank. Tank must be retested as prescribed in sec. 31 (f) before being returned to service.

(c) A tank car other than of the ICC-106A and 107A type that bears evidence of damage to the metal by fire must be withdrawn from transportation service: *Provided, however,* That where the damage to the tank is local only or confined to a section not exceeding 25 percent of the tank surface, the damaged material may be replaced.

(d) (1) Tanks of ICC-106A and ICC-107A type exposed to the action of fire must not again be placed in service until they have been inspected inside and outside, to determine that no reduction in wall thickness has resulted, and properly heat-treated and retested. These operations must be carried out, supervised, and reported, as prescribed by these specifications for original heat treatment and test.

(d) (2) For tank motor vehicles which have been exposed to the action of fire, see Motor Carrier Safety Regulations, Revised, Part 7.

(e) After alterations of tank cars or equipment therefor from original design, a certificate of compliance with the specifications, similar to that required in specs. 103, 104A, 105A300, 106A500, 107A, and 108, respectively, must be furnished to the car owner, to the Bureau of Explosives, and to the secretary, mechanical division, Association of American Railroads.

(f) Metal tanks and safety valves of tank cars listed in the table in sec. 31 (a) must be retested within the periods and by methods prescribed in the respective specifications. For cars listed in second column of table, retests must conform to footnotes, and to specifications for cars listed on corresponding lines in first column of table. Retests of all tanks and safety valves must be certified by party making tests to owners of tank cars and to the Bureau of Explosives. Certifications must show initials and numbers of cars, pressure to which tested, date of test, place of test, and by whom test is made.

(g) Before a tank car may be used for the transportation of any commodity other than that commodity for which it is currently equipped and authorized as indicated by the name of the commodity stenciled on the tank in accordance with the marking requirements of

the specification, the owner of the car, or party authorized by the owner, must secure approval for changes in the stenciled name, manhole closure, safety valve, induction and eduction valves and pipes, and such other changes as are necessary to make the car suitable for the new service. A certificate showing the changes which were approved and made and the date must be filed with the Bureau of Explosives and the secretary, mechanical division, Association of American Railroads.

NOTE.—For qualification of cylinders and tank cars for compressed gases see sec. 303 (p) (1), (p) (2), and (q).

(h) A tank car that leaks, or that has any defect which would make leakage during transit probable, or that has not been properly tested and marked, must not be used for the transportation of dangerous articles.

(i) Before tank cars are loaded, the shipper must examine the tanks and their appurtenances to see that the safety and outlet valves, the safety vents, the closures of all openings, and the protective covers of all appurtenances are in proper condition. Tanks with bottom discharge outlets must have their outlet caps off during entire time tanks are being loaded. After loading, tanks which show any dropping of liquid contents at the seams or rivets, or with bottom outlet valves which permit more than a dropping of the liquid with the outlet caps off, must not be offered for transportation until proper repairs have been made.

(j) Tank cars equipped with interior heater coils must be loaded with heater coil inlet and outlet caps off during entire time tanks are being loaded and show no leakage with these caps off.

(k) All closures of openings in tank cars and of their protective housing must be properly secured in place by the use of a bar, wrench, or other suitable tool. A wrench having a handle at least 48 inches long must be used to apply the outlet valve cap. Manhole covers and outlet valve caps must be made tight against leakage of vapor and liquid, by use of gaskets of suitable material, before cars are tendered to carrier for transportation. Luting materials must not be used in outlet cap or on threads of bottom outlet.

NOTE.—Safety valves now used on tank cars, A. R. A. classes II, III, and IV and I. C. C. specs. 103 and 104, are reported to permit slow leakage of vapor and it appears that material changes in the design and construction of these valves are necessary to make them tight. The Commission has notified the Association of American Railroads, representing the carriers, and the American Petroleum Institute, representing the shippers, that the necessary changes must be made with the least possible delay. To accomplish this result, new designs must be devised and tested experimentally, and in the meantime necessary shipments must be made in tank cars now available. Pending the accomplishment of these changes, tank cars with safety valves which permit only a slow leakage of vapor may be used.

(l) For regulations applying to tank motor vehicles, see Motor Carrier Safety Regulations, Revised, Part 7. Until further order of the Commission inflammable liquids, corrosive liquids, compressed petroleum gases, and poisonous liquids class B, may be offered for transportation by tank motor vehicle authorized in Motor Carrier Safety Regulations, Revised, Part 7, when regulations herein authorize transportation in tank cars.

EXPLOSIVES, PACKING AND MARKING

50 FORBIDDEN EXPLOSIVES

(a) The offering of the following explosives for transportation by common carriers by rail freight, rail express, highway, or water is forbidden:

(b) *Explosive compositions* that ignite spontaneously or undergo marked decomposition when subjected for 48 consecutive hours to a temperature of 75° C. (167° F.).

(c) *Explosives* containing an ammonium salt and a chlorate.

(d) *Liquid nitroglycerin*. (For shipment by carrier by motor vehicle other than common carriers, see Motor Carrier Safety Regulations, Revised, Part 7.)

(e) *Explosives condemned by the Bureau of Explosives* (except properly packed samples for laboratory examinations). Appeal may be made to the Commission from such condemnations.

(f) *Leaking or damaged packages of explosives*.

(g) *Condemned or leaking dynamite* must not be repacked and offered for shipment unless the repacking is done by a competent person in the presence of, or with the written consent of, an inspector, or with the written authority of the chief inspector of the Bureau of Explosives.

51 ACCEPTABLE EXPLOSIVES

(a) For the purpose of these regulations, *acceptable explosives* are divided into three classes as defined herein, viz. (see commodity list for restrictions for shipments by rail express):

(b) *Class A*. Dangerous explosives; detonating or otherwise of maximum hazard.

(c) *Class B*. Less dangerous explosives; inflammable hazard.

(d) *Class C*. Relatively safe explosives; minimum hazard.

52 SAMPLES OF EXPLOSIVES AND EXPLOSIVE ARTICLES

(a) *New explosives, including fireworks and explosive devices*, must be examined and approved by the Bureau of Explosives as safe for transportation before being offered for shipment, except that a sample of such explosives, fireworks and explosive devices, not to exceed 5 pounds net weight may be offered for transportation by carriers by rail freight, highway, or water for this examination. Samples of explosives, ex-

cept liquid nitroglycerin, other than new explosives for laboratory examination not exceeding 5 pounds net weight may be offered for transportation by carriers by rail freight, highway, or water. For the purpose of these regulations a new explosive, including fireworks and explosive devices, is the product of a new factory or an explosive or explosive device of an essentially new composition or character made by any factory.

(b) Before being offered for shipment, explosive articles in the experimental state must be made safe by removal of ignition elements or otherwise.

(c) Shipments of samples of explosives, fireworks and explosive devices must be packed, marked, and described as required by these regulations for the explosive contained therein.

Samples of explosives and explosive articles for transportation by rail express

(d) (1) *Samples of explosives (except liquid nitroglycerin)*, including fireworks and explosive devices for examination in a laboratory only and not intended for use or demonstration, when properly packed and not exceeding a net weight of one-half pound for each sample, and not exceeding 20 one-half pound samples transported at one time in a single car or vehicle may be offered for transportation by rail express when packed as follows:

(d) (2) *Packing*. Samples of explosives including fireworks and explosive devices for laboratory examination must be packed in well-secured metal cans or glass bottles, or in strong waterproof paper or cardboard packages; each sample must consist of not more than one-half pound of explosive, and the interior package must be placed in sawdust or similar cushioning material, at least 2 inches thick, in a wooden box, spec. 14 or 15A.

(d) (3) Whenever these samples of explosives for laboratory examination are contained in a metal envelope or receptacle, this receptacle must be properly cushioned with sawdust or similar cushioning material in a strong wooden box, and this interior box must be packed in a wooden box, spec. 14 or 15A, with at least 2 inches of cushioning material separating the boxes.

(d) (4) Not more than 100 blasting caps may be shipped in one outside package for laboratory examination, and they must be packed and cushioned as provided in sec 52 (d) (3).

(d) (5) *Weight*. Not more than 20 half-pound samples of explosives for laboratory examination may be packed in one outside box or transported at one time.

(d) (6) The net weight of the explosive contents must be plainly marked by the shipper on the outside of each box offered for transportation.

(d) (7) *Label.* Each outside package containing samples of explosives for laboratory examination must have securely and conspicuously attached to it a square, red certificate label, measuring 4 inches on each side, bearing in black letters the following:

RED LABEL FOR SAMPLES OF EXPLOSIVES
(Reduced size)



53 EXPLOSIVES IN MIXED PACKING

Unless specifically authorized by these regulations, explosives must not be packed in the same outside package with each other or with other articles. Explosives, except blasting caps and other initiating explosives, in separate interior containers, may be shipped when packed in the same outside package of gross weight not exceeding 50 pounds, provided the weight of any interior package of explosives does not exceed 8 ounces and provided the interior packages are so cushioned and protected as to insure their transportation without rupture or leakage of contents. The package must be marked and described with the name of the most dangerous explosive included such as "HIGH EXPLOSIVE," or "BLACK POWDER."

CLASS A—DANGEROUS EXPLOSIVES

54 AMMUNITION FOR CANNON

Ammunition for cannon is all fixed or separate loading ammunition of 37 mm (1½ inches) caliber and larger which is fired from a cannon, gun, or mortar, as distinguished from ammunition fired from a device such as a pistol, revolver, rifle, shot gun, or similar firearm.

55 (a) *Ammunition for cannon with explosive projectiles, gas projectiles, smoke projectiles, or incendiary projectiles or shell* is fixed ammunition assembled in a unit consisting of the cartridge case containing the propelling charge and primer, and the projectile, or shell, fuze or unfuzed. Detonating fuzes, tracer fuzes, explosive or ignition devices, or fuze parts with explosives contained therein must not be assembled in ammunition or included in the same outside package unless shipped by, or to the War or Navy Department of the United States Government or unless of

a type approved by the Bureau of Explosives.

(b) *Packing.*—*Ammunition for cannon with explosive projectiles, gas projectiles, smoke projectiles, or incendiary projectiles or shell* must be well packed and properly secured in strong wooden or metal containers.

(c) *Marking.* Each outside package must be plainly marked "AMMUNITION FOR CANNON WITH EXPLOSIVE PROJECTILES," "AMMUNITION FOR CANNON WITH GAS PROJECTILES" (see sec. 402 (g) for required label), "AMMUNITION FOR CANNON WITH SMOKE PROJECTILES," or "AMMUNITION FOR CANNON WITH INCENDIARY PROJECTILES," as the case may be.

(d) Articles as defined in sec. 55 (a) must not be offered for transportation by rail express, except as provided in sec. 52.

56 AMMUNITION—NONEXPLOSIVE

Material relating to ammunition for cannon, but containing no explosive or other dangerous article, such as cartridge cases, "dummy" or "drill" cartridges, etc., sand-loaded projectiles, sand-loaded bombs, empty projectiles, empty mines, empty bombs, solid projectiles, or empty torpedoes, is exempt from these regulations. Rotating bands should be protected against deformation by method of packing or loading.

57 AMMUNITION—PROJECTILES, GRENADES, BOMBS, MINES, AND TORPEDOES

(a) *Explosive projectiles* are shells or projectiles loaded with explosives or bursting charges, with or without other materials, for use in cannon, guns, or mortars.

(b) *Grenades, hand or rifle,* are small metal or other containers designed to be thrown by hand or projected from a rifle. They are filled with an explosive or a liquid, gas, or solid material such as a toxic or tear gas or an incendiary or smoke producing material and a bursting charge. When shipped without explosives or bursting charges, see secs. 330, 342, and 364.

(c) *Explosive bombs* are metal or other containers filled with explosives. They are used in warfare and include aeroplane bombs and depth bombs.

(d) *Explosive mines* are metal containers filled with a high explosive.

(e) *Explosive torpedoes,* such as are used in warfare, are metal devices containing a means of propulsion and a quantity of high explosives.

(f) (1) *Packing.* Detonating fuzes, tracer fuzes, explosive or ignition devices, bouchons, or fuze parts with explosives contained therein, must not be assembled in explosive projectiles, grenades, explosive bombs, explosive mines, or explosive torpedoes, or included in the same outside package with them unless shipped by, for, or to the War or Navy Department of the United States Gov-

ernment or unless of a type approved by the Bureau of Explosives.

(f) (2) *Explosive projectiles, explosive torpedoes, explosive mines, explosive bombs, or explosive grenades* except as provided in sec. 57 (f) (3), must be packed and properly secured in strong wooden or metal boxes.

(f) (3) *Explosive projectiles, explosive torpedoes, explosive mines, or explosive bombs,* exceeding 90 pounds in weight may be shipped without being boxed only by, for, or to the War or Navy Department of the United States Government.

(f) (4) *Gas projectiles, smoke projectiles, incendiary projectiles, gas bombs, smoke bombs, incendiary bombs, gas grenades, smoke grenades, and incendiary grenades,* containing a bursting charge must be packed and properly secured in strong wooden boxes. Detonating fuzes, bouchons or ignition elements must not be assembled in these articles unless shipped by, for, or to the War or Navy Department of the United States Government or unless of a type approved by the Bureau of Explosives. (See secs. 190, 330, 342, and 364 for nonexplosive chemical or poisonous ammunition.)

(g) *Weight.* The gross weight of a box containing more than one projectile, mine, grenade, or bomb must not exceed 250 pounds.

(h) (1) *Marking.* Each exterior package or projectile, bomb, or mine must be plainly marked "EXPLOSIVE PROJECTILE," "EXPLOSIVE TORPEDO," "EXPLOSIVE MINE," "EXPLOSIVE BOMB," "HAND GRENADES," or "RIFLE GRENADES," as the case may be.

(h) (2) Ammunition for cannon with gas projectiles, and bombs, projectiles, grenades or other containers loaded with a poisonous gas or liquid, class A, and an explosive charge, either boxed or unboxed, (see sec. 57 (f) (3)) must bear the white "Poison Gas" label.

(i) For regulations for shipping ammunition containing chemicals but no explosives or bursting charges, see chemical ammunition, secs. 330, 342, and 364.

(j) Articles as defined in sec. 57 (f) must not be offered for transportation by rail express, except as provided in sec. 52.

58 AMMUNITION FOR SMALL ARMS WITH EXPLOSIVE BULLETS

(a) *Ammunition for small arms with explosive bullets* is fixed ammunition to be used in machine guns or similar firearms and consists of a metallic cartridge case, the primer and the propelling charge, with explosive bullet with or without detonating fuze, the component parts necessary for one firing being all in one assembly. Detonating fuzes, tracer fuzes, explosive or ignition devices or fuze parts with explosives contained therein must not be assembled in ammunition or included in the same outside package unless shipped by, for, or to the War or Navy Department of the United States Government or unless of

a type approved by the Bureau of Explosives.

(b) *Packing and weight.* Ammunition for small arms with explosive bullets must be well packed and properly secured in strong wooden or metal containers. The gross weight of the outside package must not exceed 150 pounds.

(c) *Marking.* Each outside package must be plainly marked "AMMUNITION FOR SMALL ARMS WITH EXPLOSIVE BULLETS."

(d) *Ammunition for small arms with explosive bullets* must not be offered for transportation by rail express, except as provided for in sec. 52.

59 AMMUNITION, CHEMICAL, EXPLOSIVE

(a) Chemical ammunition used in warfare is all kinds of explosive chemical projectiles, shells, bombs, grenades, etc., loaded with toxic, tear, or other gas, smoke, or incendiary agent; also such miscellaneous apparatus as cloud-gas cylinders, smoke generators, etc., that may be utilized to project chemicals.

(b) When these articles are shipped assembled with their ignition elements, bursting charges, detonating fuzes, or explosive components they must be shipped in conformity with the regulations prescribed for explosive articles, class A, see sec. 57. For shipment of these articles not containing ignition elements, bursting charges, detonating fuzes, or other explosive components, see secs. 330, 342, and 364.

(c) *Chemical explosive, ammunition* must not be offered for transportation by rail express, except as provided in sec. 52.

60 BLACK POWDER AND LOW EXPLOSIVES

(a) *Black powder and low explosives* are general names used to describe all explosives similar in composition or characteristics to ordinary black powder and which cannot be detonated by a commercial blasting cap. Examples are rifle, sporting, cannon, and blasting powders. Flash powder sheets in bulk, flash powders packed in inner units exceeding 2 ounces each, and flash powder or spreader cartridges exceeding 72 grains each are classed as low explosives. (See sec. 64 for shipments made as fireworks.)

(b) (1) *Packing.* *Black powder and low explosives* must be packed in containers complying with the following specifications:

(b) (2) Spec. 10B. Wooden barrels or kegs. Not over 200 pounds gross weight.

(b) (3) Spec. 13. Metal kegs, not less than 7 inches long. Net weight not less than 6¼ pounds nor more than 150 pounds.

(b) (4) Bundles of metal kegs, spec. 13, firmly tied together with rope and wrapped in strong burlap, canvas, or similar material, securely sewed and roped, authorized. Net weight of powder must not exceed 100 pounds.

(b) (5) (a) Spec. 14, 15A, or 16A. Wooden boxes with inside containers which must be one of the following:

(b) (5) (b) Spec. 13. Metal kegs. Gross weight of spec. 14 box not to exceed 140 pounds. Gross weight of spec. 15A or 16A box not to exceed 200 pounds.

(b) (5) (c) Fiber or metal containers not over 1½ pounds capacity each. Gross weight of spec. 14 box not to exceed 140 pounds. Gross weight of spec. 15A or 16A box not to exceed 200 pounds.

(b) (5) (d) Cotton bags of at least 4-ounce cotton duck not over 25 pounds capacity each. Gross weight of spec. 14 box not to exceed 140 pounds. Gross weight of spec. 15A or 16A box not to exceed 200 pounds.

(b) (5) (e) Cylindrical fiber cartridges not over 5 inches diameter nor over 18 inches long with fiber at least 0.05 inch thick and paraffined on outer surface. All joints must be securely glued or cemented. Boxes must be completely lined with strong paraffined paper or other suitable waterproofed material, without joints or other openings at the bottom or sides. Gross weight not to exceed 75 pounds.

(b) (5) (f) Strong paraffined paper cartridges not over 12 inches long, authorized only for compressed pellets (cylindrical block) ⅞ inch or more in diameter. Boxes must be lined as prescribed for cylindrical fiber cartridges, sec. 60 (b) (5) (e). Gross weight not to exceed 75 pounds.

(b) (6) (a) Spec. 23F. Fiberboard boxes with inside containers which must be one of the following:

(b) (6) (b) Cylindrical fiber cartridges not over 5 inches diameter nor over 18 inches long with fiber at least 0.05 inch thick paraffined on outer surface and all joints must be securely glued or cemented. Boxes must be completely lined with strong paraffined paper or other suitable waterproofed material, without joints or other openings at the bottom or sides. Gross weight not to exceed 65 pounds.

(b) (6) (c) Strong paraffined paper cartridges not over 12 inches long authorized only for compressed pellets (cylindrical block) ⅞ inch or more in diameter. Boxes must be lined as prescribed for cylindrical, fiber cartridges. Gross weight not to exceed 65 pounds.

(c) (1) *Black powder* (not low explosives) in addition to containers specified in secs. 60 (b) (2) to (b) (6) must be shipped in containers complying with the following specifications:

(c) (2) (a) *Spec. 14, 15A, or 16A.* Wooden boxes with inside containers which must be:

(c) (2) (b) Cloth or paper bags of capacity not exceeding 25 pounds net weight, provided the completed shipping package shall be capable of standing a drop of 4 feet without rupture of inner or outer containers. The completed package must not exceed 50 pounds, net weight, of black powder.

(c) (3) (a) *Spec. 23F.* Fiberboard boxes with inside containers which must be:

(c) (3) (b) Cloth or paper bags of capacity not exceeding 25 pounds net weight, provided the completed shipping package shall be capable of standing a drop of 4 feet without rupture of inner or outer containers. The tubes of the box may be eliminated and a single tube as specified in spec. 23F may be substituted. The completed package shall not contain more than 50 pounds, net weight, of black powder.

(d) (1), *Low explosives* (not black powder) may in addition to the containers specified in sec. 60 (b) (2) to (b) (6), be shipped in containers complying with the following specifications:

(d) (2) *Spec. 14, 15A, or 16A.* Wooden boxes with inside containers which must be: strong paper bags of capacity not exceeding 25 pounds. Gross weight of spec. 14 box must not exceed 140 pounds. Gross weight of spec. 15A or 16A box must not exceed 200 pounds.

(d) (3) *Spec. 23F.* Fiberboard boxes with inside containers which must be strong paper bags of capacity not exceeding 25 pounds. Gross weight must not exceed 65 pounds.

(e) (1) *Marking.* Each outside package must be plainly marked, stamped, or stenciled "BLACK POWDER" or "LOW EXPLOSIVES," and may also show "BLASTING," "RIFLE," etc., as "BLACK BLASTING POWDER," "BLACK RIFLE POWDER," "LOW BLASTING EXPLOSIVE," or "BLACK PELLET POWDER."

(e) (2) Inside containers of over 1½ pounds capacity each in boxes, must be packed with filling holes up, and the boxes must be marked on top "THIS SIDE UP."

(e) (3) Additional marks, trade names, etc., may appear if desired, but such additional marking must not be more conspicuous than nor obscure the marking prescribed herein.

(f) *Black powder and low explosives* must not be offered for transportation by rail express, except as provided in sec. 52.

61 HIGH EXPLOSIVES

Definitions and Preparation

(a) (1) For the purpose of these regulations, high explosives (except smokeless powders, initiating or priming explosives) are all explosives more powerful than low explosives or ordinary black powder. Their distinguishing characteristic is their susceptibility to detonation by a blasting cap. Examples of high explosives are dynamite, picric acid, picrates, chlorate powders, nitrate of ammonia powders, trinitrotoluene, dry nitrocellulose (guncotton and negative cotton), dry nitrostarch, trinitroresorcinol, and fireworks that can be exploded en masse.

(a) (2) *High explosives* (dynamite), except gelatin dynamite, when offered for transportation by rail freight or highway must not contain in excess of 60 percent of liquid explosive ingredient and when offered for transportation by carrier by water must not contain in excess of 75 percent of liquid explosive ingredient. Maximum limit of liquid explosive ingredient specified for transportation by carrier by water applies only for such explosives as consist principally of wood pulp or other satisfactory absorbent and liquid explosive, which are comparable with good commercial dynamite under tests as to leakage of liquid ingredient and sensitiveness to the shocks of transportation, and for shipments that are otherwise in compliance with regulations herein for the transportation of high explosives.

(a) (3) *High explosives* consisting of a liquid mixed with an absorbent material must have the absorbent (wood pulp or similar material) in sufficient quantity and of satisfactory quality, properly dried at the time of mixing; nitrate of soda must be dried at the time of mixing to less than 1 percent of moisture; and the ingredients must be uniformly mixed so that the liquid will remain thoroughly absorbed under the most unfavorable conditions incident to transportation.

(a) (4) *High explosives* containing nitroglycerin or other liquid explosive ingredients must have uniformly mixed with an absorbent material a satisfactory antacid, which must be in quantity sufficient to have the acid neutralizing power of an amount of magnesium carbonate equal to 1 percent of the nitroglycerin or other liquid explosive ingredient.

(b) (1) *Packing.* Cartridges shall consist of a column of explosives completely inclosed in a shell made of strong paper, so treated that it will not absorb the liquid ingredient of the explosive.

(b) (2) Bags shall be made of strong paper so treated that it will not absorb the liquid ingredient of the explosive.

(b) (3) All boxes in which high explosives are packed must be lined with strong paraffined paper or other suitable material. Lining must be without joints or other openings or with cemented joints at the bottom, ends, or sides of boxes, and for explosives with liquid ingredient must be impervious to such ingredient and also to water. Covers of boxes must be protected from contact with explosives by lining paper or other suitable material. (See spec. 2L for authorized lining material.)

(b) (4) Dry, fine wood pulp or sawdust, at least $\frac{1}{4}$ inch in depth, must be spread over the bottom of boxes, lined in accordance with sec. 61 (b) (3), before the cartridges or bags of explosives with liquid ingredient are packed therein.

(b) (5) All cartridges exceeding 4 inches in length except gelatin dynamite, or high explosives containing more than

10 percent of a liquid explosive ingredient, must be placed horizontally in boxes. Bags must be packed with their filling holes up.

(b) (6) Movement of cartridges and bags of high explosives within the boxes shall be prevented by sufficiently tight packing.

(c) *High Explosives With Explosive Ingredient*

(c) (1) (a) *High explosives* (dynamite) containing not more than 30 percent liquid explosive ingredients must be prepared as prescribed in secs. 61 (a) (2) to 61 (b) (6), and packed in containers complying with the following specifications:

(c) (1) (b) Spec. 14, 15A, or 16A, wooden boxes, or spec. 23F, fiberboard boxes, with inside containers which must be one of the following:

(c) (1) (c) Cartridges not exceeding 8 inches in diameter or 50 pounds in weight, with length not to exceed 30 inches. Gross weight of wooden boxes not to exceed 75 pounds. Gross weight of fiberboard boxes not to exceed 65 pounds.

(c) (1) (d) Bags not exceeding $12\frac{1}{2}$ pounds each, packed with filling holes up. Gross weight of wooden boxes not to exceed 75 pounds. Gross weight of fiberboard boxes not to exceed 65 pounds.

(c) (2) *High explosives* (dynamite) containing 10 percent or less of a liquid explosive ingredient in cartridges or bags as prescribed in sec. 61 (b) (1) and (b) (2) may be packed in wooden boxes, gross weight not to exceed 140 pounds or fiberboard boxes, gross weight not to exceed 65 pounds.

(c) (3) (a) *High explosives* (dynamite) containing more than 30 percent liquid explosive ingredients must be prepared as prescribed in secs. 61 (a) (2) to 61 (b) (6), and in containers complying with the following specifications:

(c) (3) (b) Spec. 14, 15A, or 16A, wooden boxes, or spec. 23F, fiberboard boxes, with inside containers which must be one of the following:

(c) (3) (c) Cartridges not exceeding 4 inches in diameter or 8 inches in length; or cartridges not exceeding 5 inches in diameter or 10 inches in length, provided each such cartridge is inclosed alone, or with other cartridges in another strong paper shell and the resulting cartridge dipped in melted paraffin or equivalent material. The length of such completed cartridge shall not exceed 30 inches. Gross weight of wooden boxes not to exceed 75 pounds. Gross weight of fiberboard boxes not to exceed 65 pounds.

(c) (4) (a) *High explosives* (gelatin dynamite and blasting gelatin) must be prepared as prescribed in sec. 61 (a) (2) to 61 (b) (6), and in containers complying with the following specifications:

(c) (4) (b) Spec. 14, 15A, or 16A, wooden boxes, or spec. 23F, fiberboard

boxes, with inside containers which must be one of the following:

(c) (4) (c) Cartridges not exceeding 8 inches in diameter or 50 pounds in weight, with length not to exceed 30 inches. Bags not exceeding $12\frac{1}{2}$ pounds each packed with filling holes up. Gross weight of wooden boxes not to exceed 75 pounds. Gross weight of fiberboard boxes not to exceed 65 pounds.

(c) (5) (a) *High explosives* (straight gelatin dynamites of 80 percent strength and over and blasting gelatin) must be packed in cartridges or in bulk in outside boxes. When packed in bulk in boxes double lining paper throughout must be used. Containers must comply with the following specifications:

(c) (5) (b) Spec. 14, 15A, or 16Aa. Wooden boxes.

(c) (5) (c) Spec. 23F. Fiberboard boxes.

(c) (5) (d) Gross weight of wooden boxes not to exceed 75 pounds. Gross weight of fiberboard boxes not to exceed 65 pounds.

(d) *High Explosives With No Liquid Explosive Ingredient*

(d) (1) High explosives containing no liquid explosive ingredients if their sensitiveness to percussion is not greater than that measured by the blow delivered by an 8-pound weight dropping from a distance of 7 inches on a compressed pellet of the explosive three-hundredths of an inch thick and two-tenths of an inch in diameter, confined rigidly between hard steel surfaces as in the standard impact-testing apparatus of the Bureau of Explosives, must be packed in cartridges, or in bags in outside boxes. They must be packed in cartridges when their sensitiveness is greater than the limit prescribed herein. Such explosives when dry may be packed in strong sift-proof cloth or paper bags of capacity not exceeding 25 pounds. These explosives must be packed in outside containers complying with the following specifications:

(d) (2) Spec. 14, 15A, or 16A. Wooden boxes.

(d) (3) Spec. 23F. Fiberboard boxes.

(d) (4) Spec. 10B. Wooden barrels or kegs.

(d) (5) Gross weight of wooden boxes not to exceed 140 pounds. Gross weight of fiberboard boxes not to exceed 65 pounds.

(d) (6) When such explosives contain over 5 percent moisture, boxes must be lined with strong paraffined paper or other authorized material, spec. 2L.

(d) (7) When such explosives are in combination cartridges, consisting of column of explosives with core of dynamite, they may be shipped when packed in outside boxes with 65 pounds as the maximum gross weight. The column of explosives must be completely inclosed in waterproofed cloth or strong waterproofed paper and must not exceed 6 inches in diameter, 20 inches in length, or gross weight of 25 pounds.

(e) High Explosives With No Liquid Explosive Ingredient Nor Any Chlorate

(e) (1) High explosives containing no liquid explosive ingredient nor any chlorate if their sensitiveness to percussion is not greater than that measured by the blow delivered by an 8-pound weight dropping from a distance of 7 inches on a compressed pellet of the explosive three-hundredths of an inch thick and two-tenths of an inch in diameter, confined rigidly between hard steel surfaces as in the standard impact-testing apparatus of the Bureau of Explosives, must be packed in cartridges, or in bags in outside boxes. They must be packed in cartridges when their sensitiveness is greater than the limit prescribed herein. Such explosives when dry may be packed in strong sift-proof cloth or paper bags of capacity not exceeding 25 pounds. These explosives must be packed in outside containers complying with the following specifications:

(e) (2) *Spec. 14, 15A, or 16A.* Wooden boxes.

(e) (3) *Spec. 23F.* Fiberboard boxes.

(e) (4) *Spec. 10B.* Wooden barrels or kegs.

(e) (5) Gross weight of wooden boxes not to exceed 140 pounds. Gross weight of fiberboard boxes not to exceed 65 pounds.

(e) (6) When such explosives contain over 5 percent moisture, boxes must be lined with strong paraffined paper or other authorized material, *spec. 2 L.*

(e) (7) When such explosives are in combination cartridges, consisting of column of explosives with core of dynamite, they may be shipped when packed in outside boxes with 65 pounds as the maximum gross weight. The column of explosives must be completely inclosed in waterproofed cloth or strong waterproofed paper and must not exceed 6 inches in diameter, 20 inches in length, or gross weight of 25 pounds.

(f) (1) *Ammonium picrate, nitrourea, picric acid, tetryl, trinitroresorcinol, and trinitrotoluene*, in dry condition, in addition to containers prescribed in *sec. 61 (e) (1) to (e) (6)* must be shipped in containers complying with the following specifications:

(f) (2) *Spec. 14, 15A, or 16A.* Wooden boxes with strong paper or cloth bags of capacity not exceeding 50 pounds, packed with filling holes up.

(f) (3) *Spec. 21A.* Fiber drums. Net weight not to exceed 200 pounds.

(f) (4) *Ammonium picrate, dry, picric acid, dry, trinitrobenzene, dry, and trinitrotoluene, dry*, in quantity not exceeding 4 ounces in one outside package, may be shipped by carriers by rail freight, rail express, highway, or water as drugs, medicines, or chemicals, without other restrictions, when in securely closed glass bottles properly cushioned to prevent breakage.

(f) (5) *Ammonium picrate, picric acid, trinitrobenzene, trinitroresorcinol, and trinitrotoluene* when wet with not

less than 10 pounds of water to each 90 pounds of dry material must be shipped in containers complying with the following specifications:

(f) (6) *Spec. 10B.* Wooden barrels or kegs. Not over 50 gallons nominal capacity.

(f) (7) (See *sec. 192* for shipments of wet ammonium picrate or wet picric acid not in excess of 16 ounces and *sec. 193* for shipment of wet picric acid not in excess of 25 pounds.) (See *sec. 212* for shipments of wet trinitrobenzene and wet trinitrotoluene not in excess of 16 ounces.)

(g) (1) *Nitrocellulose* must be shipped in containers complying with the following specifications:

(g) (2) *Spec. 14, 15A, or 16A.* Wooden boxes with inside packages which must be:

(g) (3) Inside packages containing not more than 1 pound each of dry, uncompressed nitrocellulose, wrapped in strong paraffined paper or suitable sparkproof material. Completed outside package not to contain more than 10 pounds dry nitrocellulose.

(g) (4) Inside packages containing compressed sticks or blocks of dry nitrocellulose wrapped in strong paraffined paper. Gross weight not to exceed 75 pounds.

(h) *Marking.* Boxes containing high explosives must be plainly marked on top and on one side or end, and kegs, drums, or barrels containing high explosives must be marked on both ends, "HIGH EXPLOSIVES—DANGEROUS" in letters not less than $\frac{1}{8}$ inch in height. The tops of boxes, except those referred to in *sec. 61 (d) and (e)*, must be marked "THIS SIDE UP."

(i) *High explosives* must not be offered for transportation by rail express, except as provided in *sec. 52.*

62 INITIATING OR PRIMING EXPLOSIVES

(a) For the purpose of these regulations, *initiating or priming explosives* are explosive compositions used as a component of blasting caps, detonators and primers. These explosives are commonly more sensitive to flame, impact or friction than are high explosives.

(b) Blasting Caps and Electric Blasting Caps

(b) (1) NOTE: Blasting caps, blasting caps with safety fuse or electric blasting caps in quantity of 1,000 or less are classified as relatively safe, class C, explosives. See *sec. 67.*

(b) (2) *Blasting caps* contain from 5 to 150 grains of dry fulminate of mercury or other suitable substance either alone or in combination with fulminate of mercury, packed in a thin copper shell and fired by a slow-burning safety fuse. When a small "bridge" of fine wire is placed in a suitable priming material and arranged to fire the fulminate by means of an electric current, the cap is called an "electric blasting cap."

(b) (3) The outside of all caps must be free from fulminate or other explosive compositions.

(b) (4) *Blasting caps* containing not to exceed 50 grains of explosive composition each must be placed in strong interior containers, in which they must fit snugly, and the caps must be closed securely against leakage of contents by suitable elastic material placed over the caps. Not more than 100 such blasting caps may be packed in a single inside container. All inside containers must then be packed snugly in cartons or wrappings made of paper or pasteboard.

(b) (5) Not more than 5,000 blasting caps, not exceeding 50 grains of explosive composition each, packed in inner containers as prescribed in *sec. 62 (b) (4)* must be packed in outside containers complying with the following specifications:

(b) (6) *Spec. 14, 15A, or 16A.* Wooden boxes (see note x) with inside containers which must be:

(b) (7) Cartons or wrappings with inside containers, as prescribed in *sec. 62 (b) (4)*, which must be separated from the outside wooden box by at least one inch of tightly packed sawdust, excelsior or equivalent cushioning material. Gross weight not to exceed 150 pounds.

(b) (8) More than 5,000 blasting caps, not exceeding 50 grains of explosive composition each, packed in inner containers as prescribed in *sec. 62 (b) (4)* must be packed in outside containers complying with the following specifications:

(b) (9) *Spec. 14, 15A, or 16A.* Wooden boxes (see note x) with inside containers which must be:

(b) (10) Cartons or wrappings with inner containers as prescribed in *sec. 62 (b) (4)*, packed in an inside box made of sound lumber or a hermetically sealed metal box of metal not less than 30 gage United States standard. The inside wooden or metal box must be separated at all points from the outside wooden box by at least one inch of tightly packed sawdust, excelsior or equivalent cushioning material. Gross weight not to exceed 150 pounds.

(b) (11) More than 20,000 blasting caps containing not to exceed 50 grains of explosive composition each, must not be placed in one outside package.

(b) (12) Blasting caps containing in excess of 50 grains of explosive composition each must be packed in containers complying with the following specifications:

(b) (13) *Spec. 14, 15A, or 16A.* Wooden boxes (see note x) with inside containers which must be:

(b) (14) Strong interior containers, in which they must fit snugly, and the caps must be closed securely against leakage of contents by suitable elastic material placed over the caps. Not more than 10 such blasting caps may be packed in a single inside container. All inside containers must then be packed snugly in cartons or wrappings made of paper or pasteboard. The cartons or wrappings must be separated from outside box by at least 1 inch of tightly packed sawdust,

excelsior or equivalent cushioning material. Not more than 500 caps containing in excess of 50 grains of explosive composition each may be placed in one outside package. Gross weight not to exceed 150 pounds.

(b) (15) *Electric blasting caps* must be packed in containers complying with the following specifications:

(b) (16) *Spec. 14, 15A, or 16A.* Wooden boxes (see note x) with inside containers which must be:

(b) (17) *Pasteboard cartons* containing not more than 50 caps each. Gross weight not to exceed 150 pounds, except for export shipment.

(b) (18) *Pasteboard tube* inclosing each cap with wires or with the wires wrapped around the tube. Gross weight not to exceed 75 pounds.

(b) (19) *Blasting caps and electric blasting caps* must not be offered for transportation by rail express, except as provided in sec. 52.

(c) *Blasting caps with safety fuse*

(c) (1) Ten or less of the interior containers of not more than 100 blasting caps each, containing not to exceed 50 grains of explosive composition each, packed as prescribed in sec. 62 (b) (4), in the same outside container with safety fuse must be shipped in containers complying with the following specifications:

(c) (2) *Spec. 14, 15A, or 16A.* Wooden boxes (see note x) with inside containers which must be:

(c) (3) *Cartons or wrappings* with inner containers as prescribed in sec. 62 (b) (4), placed in the center of a coil of fuse and secured and cushioned therein to prevent movement therefrom. Gross weight not to exceed 150 pounds.

NOTE X: Closing of outside boxes by nailing tops in place with uncoated nails, at not over 3-inch centers into ends, and at not over 6-inch centers into sides, is authorized. Sizes of these nails must be not less than the following:

- 3-penny into ends and sides not over $\frac{3}{8}$ -inch thick.
- 4-penny into ends and sides over $\frac{3}{8}$ but not over $\frac{1}{2}$ -inch thick.
- 5-penny into ends and sides over $\frac{1}{2}$ but not over $\frac{5}{8}$ -inch thick.
- 6-penny into ends and sides over $\frac{5}{8}$ but not over $\frac{7}{8}$ -inch thick.
- 7-penny into ends and sides over $\frac{7}{8}$ -inch thick.

(d) (1) *Marking.* Each outside package must be plainly marked "(number) BLASTING CAPS—HANDLE CAREFULLY," "(number) ELECTRIC BLASTING CAPS—HANDLE CAREFULLY," or "(number) BLASTING CAPS WITH SAFETY FUSE—HANDLE CAREFULLY." In addition, each box must bear the marking "DO NOT STORE OR LOAD WITH ANY HIGH EXPLOSIVE."

(d) (2) *NOTE:* The number of caps must be shown in the marking.

(e) *Blasting caps with safety fuse* must not be offered for transportation by rail express, except as provided in sec. 52.

(f) *Detonating Fuzes and Boosters*

(f) (1) *Detonating fuzes* are used in the military service to detonate the high explosive bursting charges of projectiles, mines, bombs, torpedoes, and grenades. In addition to a powerful detonator, they may contain several ounces of a high explosive, such as tetryl or dry nitrocellulose, all assembled in a heavy steel envelope.

(f) (2) *Boosters* consist of a casing containing a high explosive and are used to increase the intensity of explosion of the detonator of a detonating fuze.

(f) (3) *Packing.* Detonating fuzes, boosters, or other detonating fuze parts containing an explosive, when shipped separately, must be packed and well secured in strong, tight wooden boxes.

(f) (4) *Weight.* The gross weight of one outside package containing detonating fuzes must not exceed 190 pounds. For boosters shipped separately, the gross weight must not exceed 300 pounds.

(f) (5) *Marking.* Each outside package must be plainly marked "DETONATING FUZES—HANDLE CAREFULLY," or "BOOSTERS (Explosives)—HANDLE CAREFULLY—DO NOT STORE OR LOAD WITH ANY HIGH EXPLOSIVE."

(f) (6) *Detonating fuzes and boosters* must not be offered for transportation by rail express, except as provided in sec. 52.

(g) *Diazodinitrophenol*

(g) (1) The offering of *diazodinitrophenol* in a dry condition for transportation by common carriers by rail freight, rail express, highway, or water is forbidden, except as a component of manufactured articles such as percussion caps, detonators, blasting caps, and exploders, the transportation of which is authorized herein.

(g) (2) *Packing and weight.* *Diazodinitrophenol* wet with not less than 40 percent by weight of water must be packed in containers complying with the following specifications:

(g) (3) *Spec. 5 or 5B,* metal barrels or drums, spec. 10B, wooden barrels or kegs, with inside containers which must be:

(g) (4) *Bags* made of at least 10 ounce cotton duck, rubber or rubberized cloth, which must be securely closed. These bags containing the *diazodinitrophenol* must then be placed in a rubber bag, rubberized cloth bag or bag made of suitable water-tight material and then placed in the barrel, keg, or drum. Any empty space in the outside bag must be filled with water and this bag securely closed.

(g) (5) Sufficient outage in outside container must be allowed to prevent rupturing of container in freezing weather, or a mixture of denatured alcohol and water may be used to prevent freezing in transit.

(g) (6) *Diazodinitrophenol*, wet, must not be offered for transportation by rail express, except as provided in sec. 52.

(g) (7) *Marking.* Each barrel, drum, or keg must be plainly marked "INITIATING EXPLOSIVE—DANGEROUS—DO NOT STORE OR LOAD WITH ANY HIGH EXPLOSIVE."

(h) *Fulminate of Mercury*

(h) (1) The offering of *fulminate of mercury* in a dry condition for transportation by common carriers by rail freight, rail express, highway, or water is forbidden, except as a component of manufactured articles such as percussion caps, detonators, blasting caps, and exploders, the transportation of which is authorized herein.

(h) (2) *Packing and weight.* *Fulminate of mercury* must be packed wet with not less than 25 percent by weight of water in containers complying with the following specifications:

(h) (3) *Spec. 5 or 5B,* metal barrels or drums, spec. 17E, metal drums (single-trip) or spec. 10B, wooden barrels or kegs, with inside container which must be:

(h) (4) A bag made of 4-ounce duck. Inside the bag and over the *fulminate* there must be placed a cap of the same fabric, of the same diameter as the bag. The bag must be securely tied and placed in a strong grain bag. This grain bag must also be securely tied. The dry weight of *fulminate* in one container must not exceed 150 pounds. The bag and contents must be packed in the center of the wooden barrel or keg, metal barrel or drum, and must be entirely surrounded by not less than 3 inches of well-packed sawdust saturated with water. The wooden barrel or keg, or metal barrel or drum, must be lined with a heavy, close-fitting, jute bag, closed by secure sewing to prevent escape of sawdust. The barrel, keg, or drum must be inspected carefully and all leaks stopped.

(h) (5) If shipment of *fulminate* is to take place at a time that freezing weather is to be anticipated, a mixture of denatured ethyl alcohol and water of such proportions that freezing will not occur in transit must be used.

(h) (6) *Marking.* Each barrel, keg or drum must be plainly marked "INITIATING EXPLOSIVE—DANGEROUS—DO NOT STORE OR LOAD WITH ANY HIGH EXPLOSIVE."

(h) (7) *Fulminate of mercury*, wet, must not be offered for transportation by rail express, except as provided in sec. 52.

(i) *Guanyl Nitrosamino Guanylidene Hydrazine*

(i) (1) The offering of *guanyl nitrosamino guanylidene hydrazine* in a dry condition for transportation by common carriers by rail freight, rail express, highway, or water is forbidden, except as a component of manufactured articles such as percussion caps, detonators, blasting

caps, and exploders, the transportation of which is authorized herein.

(i) (2) *Packing and weight.* Guanyl nitrosamino guanylidene hydrazine must be packed wet with not less than 30 percent by weight of water. The packing must be the same as that described in sec. 62 (h) (3) to (h) (5) for fulminate of mercury, except that the dry weight in one container must not exceed 75 pounds.

(i) (3) *Marking.* Each barrel, keg, or drum must be plainly marked "INITIATING EXPLOSIVE—DANGEROUS—DO NOT STORE OR LOAD WITH ANY HIGH EXPLOSIVE."

(i) (4) *Guanyl nitrosamino guanylidene hydrazine, wet, must not be offered for transportation by rail express, except as provided in sec. 52.*

(j) *Lead Azide*

(j) (1) The offering of *lead azide* in a dry condition for transportation by common carriers by rail freight, rail express, highway, or water is forbidden, except as a component of manufactured articles such as percussion caps, detonators, blasting caps, and exploders, the transportation of which is authorized herein.

(j) (2) *Packing and weight.* Lead azide must be packed wet with not less than 20 percent by weight of water. The packing and weight must be the same as that described in sec. 62 (h) (3) to (h) (5) for fulminate of mercury.

(j) (3) *Marking.* Each barrel, keg, or drum must be plainly marked "INITIATING EXPLOSIVE—DANGEROUS—DO NOT STORE OR LOAD WITH ANY HIGH EXPLOSIVE."

(j) (4) *Lead azide, wet, must not be offered for transportation by rail express, except as provided in sec. 52.*

(k) *Lead Styphnate*

(k) (1) The offering of *lead styphnate (lead trinitroresorcinate)* in a dry condition for transportation by common carriers by rail freight, rail express, highway, or water is forbidden, except as a component of manufactured articles such as percussion caps, detonators, blasting caps, and exploders, the transportation of which is authorized herein.

(k) (2) *Packing and weight.* Lead styphnate (lead trinitroresorcinate) must be packed with not less than 20 percent by weight of water, and in this wet condition must be packed in a bag made of rubber cloth. The lead styphnate within this bag should be divided into a number of smaller packages. There must be a cap of the same fabric and of the same diameter as the bag over the lead styphnate and inside the bag. The dry weight of lead styphnate in one outer container must not exceed 150 pounds. The bag holding the lead styphnate must be packed as described in sec. 62 (h) (3) and (4) for fulminate of mercury. If shipment of lead styphnate is to take place at a time that freezing weather is to be anticipated, it must

be wet with a mixture of denatured ethyl alcohol and water of such proportions that freezing will not occur in transit.

(k) (3) *Marking.* Each barrel, keg, or drum must be plainly marked "INITIATING EXPLOSIVE—DANGEROUS—DO NOT STORE OR LOAD WITH ANY HIGH EXPLOSIVE."

(k) (4) *Lead styphnate (lead trinitroresorcinate), wet, must not be offered for transportation by rail express, except as provided in sec. 52.*

(l) *Nitro Mannite*

(l) (1) The offering of *nitro mannite* in a dry condition for transportation by common carriers by rail freight, rail express, highway, or water, is forbidden, except as a component of manufactured articles such as percussion caps, detonators, blasting caps, and exploders, the transportation of which is authorized herein.

(l) (2) *Packing and weight.* Nitro mannite wet with not less than 40 percent by weight of water must be packed in containers complying with the following specifications:

(l) (3) Spec. 5 or 5B, metal barrels or drums, spec. 10B, wooden barrels or kegs, with inside containers which must be:

(l) (4) Bags made of at least 10-ounce cotton duck, rubber or rubberized cloth, which must be securely closed. These bags containing the nitro mannite must then be placed in a rubber bag, rubberized cloth bag or bag made of suitable watertight material and then placed in the barrel, keg, or drum. Any empty space in the outside bag must be filled with water and this bag securely closed.

(l) (5) Sufficient outage in outside container must be allowed to prevent rupturing of container in freezing weather, or a mixture of denatured alcohol and water may be used to prevent freezing in transit.

(l) (6) *Marking.* Each barrel, keg, or drum must be plainly marked "INITIATING EXPLOSIVE—DANGEROUS—DO NOT STORE OR LOAD WITH ANY HIGH EXPLOSIVE."

(l) (7) *Nitro mannite, wet, must not be offered for transportation by rail express, except as provided in sec. 52.*

(m) *Nitrosoguanidine*

(m) (1) The offering of nitrosoguanidine in a dry condition for transportation by common carriers by rail freight, rail express, highway, or water is forbidden, except as a component of manufactured articles such as percussion caps, detonators, blasting caps, and exploders, the transportation of which is authorized herein.

(m) (2) *Packing and weight.* Nitrosoguanidine wet with not less than 10 percent by weight of water must be packed in containers complying with the following specifications:

(m) (3) Spec. 5 or 5B, metal barrels or drums, spec. 17E, metal drums (single-trip), or spec. 10B, wooden barrels or

kegs, with inside container which must be:

(m) (4) A bag made of strong cloth, which must in turn be placed in the wooden barrel or keg, or metal barrel or drum. The dry weight of nitrosoguanidine in one container must not exceed 75 pounds.

(m) (5) *Marking.* Each barrel, keg, or drum must be plainly marked "INITIATING EXPLOSIVE—DANGEROUS—DO NOT STORE OR LOAD WITH ANY HIGH EXPLOSIVE."

(m) (6) *Nitrosoguanidine, wet, must not be offered for transportation by rail express, except as provided in sec. 52.*

(n) *Pentaerythrite tetranitrate*

(n) (1) The offering of *pentaerythrite tetranitrate* in a dry condition for transportation by common carriers by rail freight, rail express, highway or water is forbidden, except as a component of manufactured articles such as percussion caps, detonators, blasting caps, and exploders, the transportation of which is authorized herein.

(n) (2) *Pentaerythrite tetranitrate wet with not less than 40 percent by weight of water must be packed in containers complying with the following specifications:*

(n) (3) Spec. 5 or 5B, metal barrels or drums, spec. 10B, wooden barrels or kegs, with inside containers which must be:

(n) (4) Bags made of at least 10-ounce cotton duck, rubber or rubberized cloth, which must be securely closed. These bags containing the pentaerythrite tetranitrate must then be placed in a rubber bag, rubberized cloth bag or bag made of suitable watertight material and then placed in the barrel, keg, or drum. Any empty space in the outside bag must be filled with water and this bag securely closed.

(n) (5) Sufficient outage in outside container must be allowed to prevent rupturing of container in freezing weather, or a mixture of denatured alcohol and water may be used to prevent freezing in transit.

(n) (6) *Marking.* Each barrel, keg, or drum must be plainly marked "INITIATING EXPLOSIVE—DANGEROUS—DO NOT STORE OR LOAD WITH ANY HIGH EXPLOSIVE."

(n) (7) *Pentaerythrite tetranitrate, wet, must not be offered for transportation by rail express, except as provided in sec. 52.*

(o) *Tetrazene*

(o) (1) The offering of *tetrazene (guanyl nitrosamino guanyl tetrazene)* in a dry condition for transportation by common carriers by rail freight, rail express, highway, or water is forbidden, except as a component of manufactured articles such as percussion caps, detonators, blasting caps, and exploders, the transportation of which is authorized herein.

(o) (2) *Packing and weight.* Tetrazene (guanyl nitrosamino guanyl tetra-

zene) must be packed with not less than 30 percent by weight of water, and in this wet condition must be packed as described in sec. 62 (h) (3) and (h) (4) for fulminate of mercury, except that the dry weight of tetrazene in one outer container must not exceed 75 pounds. If the shipment of tetrazene is to take place at a time that freezing weather is to be anticipated, it must be wet with a mixture of denatured ethyl alcohol and water of such proportions that freezing will not occur in transit.

(c) (3) *Marking*. Each barrel, keg, or drum must be plainly marked "INITIATING EXPLOSIVE—DANGEROUS—DO NOT STORE OR LOAD WITH ANY HIGH EXPLOSIVE."

(c) (4) *Tetrazene (guanyl nitrosamino guanyl tetrazene)*, wet, must not be offered for transportation by rail express, except as provided in sec. 52.

CLASS B—LESS DANGEROUS EXPLOSIVES

63 AMMUNITION FOR CANNON WITH EMPTY, SAND-LOADED OR SOLID PROJECTILES OR WITHOUT PROJECTILES

(a) *Ammunition for cannon with empty projectiles, sand-loaded projectiles, solid projectiles, or without projectiles, or shell*, is fixed ammunition of caliber 37 mm (1½ inches) and larger, assembled in a unit consisting of the cartridge case containing the propelling charge and primer and with empty, sand-loaded, or solid projectiles, or without projectiles.

(b) *Packing*. Ammunition for cannon with empty projectiles, sand-loaded projectiles, solid projectiles, or without projectiles or shell, must be well packed and properly secured in strong wooden or metal containers.

(c) *Marking*. Each outside package must be plainly marked "AMMUNITION FOR CANNON WITH EMPTY PROJECTILES," "AMMUNITION FOR CANNON WITH SAND-LOADED PROJECTILES," "AMMUNITION FOR CANNON WITH SOLID PROJECTILES," or "AMMUNITION FOR CANNON WITHOUT PROJECTILES," as the case may be.

(d) *Ammunition for cannon with empty projectiles, sand-loaded projectiles, solid projectiles, or without projectiles or shell*, must not be offered for transportation by rail express, except as provided in sec. 52.

64 FIREWORKS

(a) *Fireworks* are all manufactured articles designed primarily for the purpose of producing visible or audible pyrotechnic effects by combustion or explosion. Examples are firecrackers, firecracker salutes, Roman candles, pin wheels, colored fires, rockets, serpents, railway fuses, railway torpedoes, aeroplane flares, sparklers, smoke pots, smoke candles, illuminating projectiles not fused and without bursting charges, Very signal cartridges, fireworks bombs and salutes (not high explosives), toy torpedoes, ammunition pellets fired in a special holder, flash powders in inner

units not exceeding 2 ounces each, flash sheets in interior packages, and flash powder or spreader cartridges containing not over 72 grains of flash powder each (see sec. 60 for shipments made as low explosives) and flash cartridges, consisting of a paper cartridge shell, small-arms primer, and flash composition, not exceeding 180 grains, all assembled in one piece. Fireworks must be in a finished state, exclusive of mere ornamentation, as supplied to the retail trade.

(b) (1) The offering of the following articles for transportation by common carriers by rail freight, rail express, highway, or water is forbidden:

(b) (2) *Firecrackers, flash crackers or salutes*, the explosive contents of which exceed 12 grains each in weight.

(b) (3) *Fireworks* that combine an explosive and a detonator or blasting cap.

(b) (4) *Fireworks* containing an ammonium salt and a chlorate.

(b) (5) *Fireworks* containing yellow or white phosphorus.

(b) (6) *Fireworks or fireworks compositions* that ignite spontaneously or undergo marked decomposition when subjected for 48 consecutive hours to a temperature of 75° C. (167° F.).

(b) (7) *Fireworks*, properly condemned by the Bureau of Explosives, except properly repacked samples for laboratory examinations.

(b) (8) *Toy torpedoes*, the maximum outside dimension of which exceeds ¾ inch, or toy torpedoes containing a mixture of potassium chlorate, black antimony and sulfur with an average weight of explosive composition in each torpedo exceeding 700 grains.

(b) (9) *Toy torpedoes* containing a cap composed of a mixture of red phosphorus and potassium chlorate exceeding an average of one-half (0.5) grain per cap.

(c) *Packing*

(c) (1) *Fireworks*, except as otherwise authorized, must be securely packed in containers complying with the following specifications:

(c) (2) *Spec. 11B*. Strong, tight, sparkproof wooden barrels.

(c) (3) *Spec. 15A, 15B, 16A, or 19A*. Wooden boxes. Gross weight not to exceed 500 pounds.

(c) (4) *Spec. 12B*. Fiberboard boxes. Gross weight not to exceed 65 pounds. Not permitted for illuminating projectiles, toy torpedoes, railway torpedoes, aeroplane flares, and fireworks shells or fireworks bombs of which the mortar or firing device is not an integral part.

(c) (5) *Firecrackers, Chinese*, in addition to containers specified in sec. 64 (c) (1) to (c) (4), may also be transported in the package in which they are imported, provided these packages consist of wooden boxes, or fiberboard boxes, spec. 12B, in good condition, completely covered with strong matting and do not weigh more than 100 pounds, gross.

(c) (6) *Fireworks* that can be exploded en masse, by dropping the completed shipping package from a height of six feet or by the impact of a rifle bullet, if found safe for transportation, may be shipped in accordance with these regulations applying to high explosives.

(c) (7) *Fireworks*, such as sparklers or fuses, with match tip or head, or similar igniting point or surface, must have each individual tip, head, or similar igniting point or surface entirely covered and securely protected against accidental contact or friction.

(c) (8) (a) *Flash or spreader cartridges* not exceeding 72 grains of flash powder each must be packed in containers complying with the following specifications:

(c) (8) (b) *Spec. 15A, 15B, 16A, or 19A*, wooden boxes, spec. 12B, fiberboard boxes, with inside containers which must be:

(c) (8) (c) *Cartons or tin cans* containing not over 6 cartridges and not to exceed 150 cartons or cans to an outer box.

(c) (9) (a) *Flash cartridges* consisting of a paper cartridge shell, small arms primer and flash composition, not exceeding 180 grains each, all assembled in one piece ready for firing must be packed in containers complying with the following specifications:

(c) (9) (b) *Spec. 15A, 15B, 16A, or 19A*, wooden boxes, spec. 12B, fiberboard boxes, with inside containers which must be:

(c) (9) (c) *Cartons* containing not to exceed 12 cartridges each and not more than 12 such cartons in one outside box.

(c) (10) (a) *Flash sheets* must be packed in containers complying with the following specifications:

(c) (10) (b) *Spec. 15A, 15B, 16A, or 19A*, wooden boxes, spec. 12B, fiberboard boxes, with inside containers which must be:

(c) (10) (c) *An inner package or envelope* containing not more than 6 flash sheets and not more than one dozen inner envelopes or packages inclosed in each inner pasteboard box or carton. Gross weight of wooden box not to exceed 150 pounds. Gross weight of fiberboard box not to exceed 65 pounds.

(c) (11) (a) *Photographic flash powder* must be packed in containers complying with the following specifications:

(c) (11) (b) *Spec. 15A, 15B, 16A, or 19A*, wooden boxes, spec. 12B, fiberboard boxes, with inside containers which must be:

(c) (11) (c) *Any inside container* sufficiently strong to retain contents not exceeding 2 ounces each. If bottles are used, each bottle must be packed in a fiber mailing tube with a tin bottom and tin screw cap. Not more than 4 dozen 2-ounce bottles may be packed in an outer wooden box. When packed in units not exceeding 1 ounce each without bottles in similar fiber mailing tubes and outer wooden boxes, the gross weight of

one outside wooden box must not exceed 150 pounds. Gross weight of fiberboard box not to exceed 65 pounds.

(c) (11) (d) *Photographic flash powder, flash sheets, or flash cartridges*, in quantity not exceeding 5 pounds, when in small interior wooden boxes, may be packed with nonexplosives, noninflammable, or noncorrosive articles.

(c) (12) (a) *Railway fusees, flares, or highway signals* must be packed in containers complying with the following specifications:

(c) (12) (b) *Spec. 15A, 15B, 16A, or 19A*. Wooden boxes. Gross weight not to exceed 200 pounds.

(c) (12) (c) *Spec. 12B*. Fiberboard boxes, provided that penetration of spikes of fusees through the outside containers is prevented by sheet metal of not less than 0.01 inch thickness, or a wooden board of 3-ply birch, or other hardwood, not less than 3/8-inch thick, or by two thicknesses of 0.100-inch 275-pound-test, solid fiberboard. Gross weight not to exceed 65 pounds.

(c) (12) (d) *Spec. 29*. Mailing tubes, provided the penetration of the spikes of fusees (flares or highway signals), through the outside container is prevented by one of the methods specified for fiberboard boxes, spec. 12B, in sec. 64 (c) (12) (c). Gross weight not to exceed 5 pounds.

(c) (12) (e) *Fusees, flares, pyrotechnic, or highway signals without spikes, or torches, pyrotechnic*, when offered for shipment may be packed in containers prescribed in this paragraph, omitting the protection required for these articles when equipped with spikes.

(c) (12) (f) *Fusees, flares, or highway signals* may be packed with nonexplosive or noninflammable articles provided the outside packages are marked as prescribed herein.

(c) (13) (a) *Railway torpedoes* (track torpedoes) must be packed in containers complying with the following specifications:

(c) (13) (b) *Spec. 15A, 15B, 16A, or 19A*. Wooden boxes. Net weight not to exceed 125 pounds.

(c) (14) (a) *Toy torpedoes* must be securely packed as prescribed herein in containers complying with the following specifications:

(c) (14) (b) *Spec. 15A, 15B, 16A, or 19A*. Wooden boxes. Gross weight not to exceed 65 pounds.

(c) (14) (c) *Toy torpedoes* of any kind must not be packed with other fireworks.

(c) (14) (d) *Toy torpedoes* containing a cap must be packed in sawdust, in inside paper or cardboard cartons. The size of the carton must be not less than 4 cubic inches for each grain of explosive.

(c) (14) (e) *Toy torpedoes* containing a mixture of potassium chlorate, black antimony and sulfur, must be packed in an inner container, containing not more than one-fourth gross. The capacity of this inner container must not be less than 105 cubic inches, and it must be

divided into 12 equal compartments. All vacant space inside the container must then be filled with sawdust or fine shavings.

(c) (14) (f) *Weight*. The gross weight of a package containing toy torpedoes must not exceed 65 pounds.

(d) *Weight*. Except as otherwise specified herein the gross weight of one outside package containing fireworks must not exceed 500 pounds.

(e) (1) *Marking*. Each outside package must be plainly marked in letters not less than seven-sixteenths inch in height "FIREWORKS—HANDLE CAREFULLY—KEEP FIRE AWAY."

(e) (2) Outside packages containing toy torpedoes must in addition be marked "TOY TORPEDOES."

(f) *Label*. Each outside package containing fireworks when offered for transportation by carriers by rail express or water must have securely and conspicuously attached to it a square red label measuring 4 inches on each side and bearing in black letters the following:

RED LABEL FOR FIREWORKS

(Reduced size)

4 inches

FIREWORKS

**HANDLE CAREFULLY
KEEP FIRE AWAY
DO NOT DROP NOR THROW**

**This package must not be loaded or
stored near steam pipes or
other source of heat**

This is to certify that the above articles are properly described by name and are packed and marked and are in proper condition for transportation, according to the regulations prescribed by the Interstate Commerce Commission.

(Shipper's Name)

4 inches

65 SMOKELESS POWDER

(a) Smokeless powders are propellant explosives from which there is little or no smoke when fired. They include smokeless powder for cannon and smokeless powder for small arms. *Smokeless powder for cannon* used in the United States at the present time consists of a nitrocellulose colloid and is comparatively safe to handle and transport. *Smokeless powder for small arms* may consist of nitrocellulose or nitrocellulose combined with nitroglycerin. So-called smokeless powders which are composed of picrate or chlorate mixtures are classed as high explosives.

NOTE: *Fire-extinguisher charges* containing not to exceed 50 grains of smokeless powder per unit are exempt from these regulations.

(b) (1) *Packing*. Smokeless powder for cannon when offered for transportation by carriers by rail freight, highway or water must be packed in the following containers (see sec. 65 (j) for shipments by rail express):

(b) (2) *Spec. 10B*. Wooden barrels or kegs. Gross weight not to exceed 200 pounds.

(b) (3) *Spec. 13*. Metal kegs. Gross weight not to exceed 150 pounds.

(b) (4) Tight metal cases in tight wooden boxes free from loose knots and cracks or tight metal containers. Gross weight not to exceed 200 pounds.

(c) (1) *Smokeless powder for cannon in water* when offered for transportation by carriers by rail freight, highway, or water must be packed in containers complying with the following specifications:

(c) (2) *Spec. 5, 5A, 5B, 6A, 6B, or 6C*. Metal barrels or drums.

(c) (3) *Spec. 10A or 10E*. Wooden barrels or kegs.

(c) (4) *Spec. 15A*. Wooden boxes, metal-lined, spec. 2F.

(d) *Igniters* composed of black powder may be included in shipments of smokeless powder for cannon.

(e) (1) *Unstable, condemned, or deteriorated smokeless powder for cannon* must be packed submerged in water in containers complying with the following specifications:

(e) (2) *Spec. 5, 5A, 5B, 6A, 6B, or 6C*. Metal barrels or drums.

(e) (3) *Spec. 10A or 10E*. Wooden barrels or kegs.

(e) (4) *Spec. 15A*. Wooden boxes, metal-lined, spec. 2F.

(e) (5) *Spec. 103*. Tank cars.

(e) (6) *Unstable, condemned, or deteriorated smokeless powder for cannon* must not be offered for transportation by rail express.

(f) (1) *Packing*. *Smokeless powder for small arms* when offered for transportation by carriers by rail freight, highway, or water must be packed in containers complying with the following specifications (see sec. 65 (j) for shipments by rail express):

(f) (2) *Spec. 10B*. Wooden barrels or kegs. Gross weight not to exceed 200 pounds.

(f) (3) *Spec. 13*. Metal kegs at least 8 inches long. Gross weight not to exceed 150 pounds.

(f) (4) *Spec. 14 or 15A*. Wooden boxes, metal-lined, spec. 2F. Gross weight not to exceed 200 pounds.

(f) (5) (a) *Spec. 14, 15A, 15B, 15C, 16A, or 19A*. Wooden boxes, with inside containers which must be:

(f) (5) (b) Metal kegs, spec. 13. Gross weight not to exceed 200 pounds.

(f) (5) (c) Fiber or metal containers of not more than 1½ pounds capacity each. Gross weight not to exceed 200 pounds.

(f) (5) (d) Not to exceed four metal containers, spec. 2A, of not more than 25 pounds capacity each.

(f) (6) (a) *Spec. 14, 15A, or 23F*. Wooden boxes, or fiberboard boxes, with inside containers which must be:

(f) (6) (b) Cloth or paper bags, of capacity not exceeding 25 pounds, net weight, each capable of withstanding, when filled to shipping content, at least two drops on end from a height of 4

feet, without breakage or sifting of contents. Completed package not to contain more than 50 pounds, net weight.

(g) (1) *Smokeless powder for small arms in water* when offered for transportation by carriers by rail freight, highway, or water must be packed in containers complying with the following specifications:

(g) (2) *Spec. 5, 5A, 5B, 6A, 6B, or 6C.* Metal barrels or drums.

(g) (3) *Spec. 10A, or 10B.* Wooden barrel or kegs.

(g) (4) *Spec. 15A.* Wooden boxes, metal-lined, spec. 2F.

(h) (1) *Unstable, condemned or deteriorated smokeless powder for small arms* must be packed submerged in water in containers complying with the following specifications:

(h) (2) *Spec. 5, 5A, 5B, 6A, 6B, or 6C.* Metal barrels or drums.

(h) (3) *Spec. 10A or 10B.* Wooden barrels or kegs.

(h) (4) *Spec. 15A.* Wooden boxes, metal-lined, spec. 2F.

(h) (5) *Spec. 103.* Tank cars.

(h) (6) *Unstable, condemned or deteriorated smokeless powder for small arms* must not be offered for transportation by rail express.

(i) *Marking.* Each outside package must be plainly marked "SMOKELESS POWDER FOR CANNON," "SMOKELESS POWDER FOR CANNON IN WATER," "SMOKELESS POWDER FOR SMALL ARMS," or "SMOKELESS POWDER FOR SMALL ARMS IN WATER."

(j) (1) *Smokeless powder for cannon and smokeless powder for small arms* when offered for transportation by rail express must be packed as follows (also authorized for transportation by carriers by rail freight, highway, or water):

(j) (2) In tightly closed metal cans not exceeding one-pound each, packed in outside wooden boxes, spec. 15C. Not more than 10 one-pound cans may be shipped in one outside box. Each outside package must be plainly marked "SMOKELESS POWDER FOR SMALL ARMS" or "SMOKELESS POWDER FOR CANNON," as the case may be.

CLASS C—RELATIVELY SAFE EXPLOSIVES

66 AMMUNITION FOR SMALL ARMS

(a) *Small-arms ammunition* includes all fixed ammunition, class C, such as is used in pistols, revolvers, rifles, shot guns, and similar firearms, or in machine guns, with nonexplosive bullets, and consists usually of a paper or metallic cartridge case, the primer, and the propelling powder charge, with or without shot, bullet (except explosive bullets), tear gas material, or pyrotechnics, the component parts necessary for one firing being all in one assembly.

(b) *Packing.* Small-arms ammunition must be packed in pasteboard or other inside boxes packed in securely

closed strong wooden boxes, fiberboard boxes, or metal containers.

(c) Small-arms ammunition in pasteboard or other inside boxes, in addition to containers prescribed in sec. 66 (b), may be shipped when packed in the same outside container with nonexplosive and noninflammable articles; or with small-arms primers or percussion caps in quantity not to exceed 5 pounds. The weight of the small-arms ammunition packed with other articles must not exceed 55 pounds in outside fiberboard box, or 75 pounds in outside wooden box. The outside package must be a securely closed strong wooden or fiberboard container.

(d) *Marking.* Each outside package must be plainly marked "SMALL ARMS AMMUNITION."

(e) Packages containing cartridges with tear gas material must in addition to marking prescribed herein be marked "TEAR GAS CARTRIDGES" and must be labeled with "Tear Gas" label. (See sec. 404 (1) for label.)

(f) No restrictions, other than proper description, packing and marking for small arms ammunition and additional marking and labeling for tear gas cartridges are prescribed herein for the transportation of small arms ammunition and tear gas cartridges.

67 BLASTING CAPS, BLASTING CAPS WITH SAFETY FUSE AND ELECTRIC BLASTING CAPS IN QUANTITIES NOT EXCEEDING 1,000

(a) *Blasting caps, blasting caps with safety fuse and electric blasting caps* in quantities not exceeding 1,000 caps must be packed and marked as prescribed in sec. 62 (b) to 62 (d).

(b) *Blasting caps* must not be offered for transportation by rail express, except as provided in sec. 52.

68 CORDEAU DETONANT

(a) *Cordeau detonant* is a drawn-lead tube fuse containing trinitrotoluene or a core of pentaerythrite tetranitrate overspun with yarns, tapes, and waterproofing compounds.

(b) *Cordeau detonant* must not be packed in the same package with blasting caps, or with any high explosive.

(c) *Weight.* Gross weight of one outside box must not exceed 150 pounds.

(d) *Packing.* Strong wooden boxes or barrels or fiberboard boxes.

(e) *Marking.* Each outside container must be plainly marked "CORDEAU DETONANT—HANDLE CAREFULLY."

69 FUZES—PERCUSSION, COMBINATION, TIME, TRACER, ETC.

(a) *Percussion fuzes, combination fuzes, and time fuzes,* are devices used to ignite the powder charges of ammunition or the black powder bursting charges of projectiles.

(b) *Tracer fuzes* are devices which are attached to projectiles and contain a

slow-burning composition to show the flight of projectiles at night.

(c) *Packing. Percussion, tracer, combination, and time fuzes* must be packed in strong, tight, outside wooden boxes, with special provision for securing individual packages of fuzes against movement in the box.

(d) *Weight.* The gross weight of one outside package must not exceed 150 pounds.

(e) *Marking.* Each outside container must be plainly marked with proper descriptive name and also "HANDLE CAREFULLY."

(f) No restrictions other than proper description, packing, and marking are prescribed herein for the transportation of percussion, tracer, time, or combination fuzes.

70 IGNITERS

(a) *Definitions. Cartridge bags, empty, with black powder igniters* consist of empty bags having attached thereto an igniter composed of black powder. (See sec. 65 (b), (c) and (d) when shipped with smokeless powder for cannon.)

(b) *Delay electric igniters* consist of small metal tubes containing a wire bridge in contact with a small quantity of ignition compound. The ignition compound is in contact with or in close proximity to a short piece of safety fuse.

(c) *Electric squibs* consist of small tubes or blocks containing a small quantity of ignition compound in contact with a wire bridge.

(d) *Fuse lighters and fuse igniters* are small cylindrical hollow pasteboard or metal tubes containing an igniting composition in one end, the other end being open to permit it to be placed on safety fuse.

(e) *Safety squibs* are small paper tubes containing a small quantity of black powder. One end of each tube is usually twisted and tipped with sulfur.

(f) *Packing, description, and marking. Cartridge bags, empty, with black powder igniters, safety squibs, electric squibs, delay electric igniters, and fuse lighters or fuse igniters* must be packed in strong fiberboard or wooden boxes or wooden or metal barrels or drums properly described and properly marked with the name of the article packed therein.

71 INSTANTANEOUS FUSE

Instantaneous fuse is cotton yarn impregnated with meal powder. No restrictions other than packing in strong wooden boxes or barrels plainly marked "INSTANTANEOUS FUSE" are prescribed herein.

72 PRIMERS

(a) *Primers* are devices used to ignite the powder charges of ammunition or the black powder bursting charges of projectiles. For small-arms ammunition, the primers are "small-arm primers" or "percussion caps."

(b) *Packing. Primers* (cannon, combination and small arms), percussion caps, empty cartridge cases, primed, and empty grenades, primed, must be packed in strong, tight, outside wooden boxes, with special provision for securing individual packages against movement in the box.

(c) *Small-arms primers* containing anvils must be packed in cellular inside packages, with partitions separating the layers and columns of the primers, so that the explosion of a portion of the primers in the completed shipping package will not cause the explosion of all the primers.

(d) *Percussion caps* must be packed in metal or other inside boxes containing not more than 500 caps; the construction of the cap and the kind and quantity of explosives in each must be such that the explosion of a part of the caps in the completed shipping package will not cause the explosion of all of the caps.

(e) *Small-arms primers and/or percussion caps* may be packed with nonexplosive and/or noninflammable articles, or with small-arms ammunition as provided in sec. 66 (c), the weight of the small-arms primers or percussion caps must not exceed 5 pounds in any such outside container.

(f) *Weight.* The gross weight of one outside package must not exceed 150 pounds.

(g) Each outside container must be plainly marked with proper descriptive name and also "HANDLE CAREFULLY."

(h) No restrictions other than proper shipping name, packing and marking are prescribed herein for the transportation of percussion caps, cannon primers, small arms primers, combination primers, empty cartridge cases primed, or empty grenades primed.

73 SAFETY FUSE

Safety fuse, consisting of a core of black powder overspun with yarns, tapes, and/or waterproofing compounds must be packed in outside fiberboard boxes, wooden boxes, wooden barrels, bales, or metal containers, and must be described for shipping purposes as safety fuse. No other restrictions apply.

74 TOY CAPS

(a) *Toy paper caps*, consisting of paper cap ammunition for toy pistols, in sheets, strips, rolls, or individual caps, must not contain more than an average of twenty-five hundredths of a grain of explosive composition per cap and must be packed in inside packages constructed of cardboard not less than .013 inch in thickness or of metal not less than .008 inch in thickness which shall provide a complete enclosure and the minimum dimensions of each side or end of such package shall be not less than 1/8 inch in height. The number of caps in these inside packages shall be limited so that not more than 10 grains of explosive composition shall be packed into one cubic

inch of space and not exceeding 17.5 grains of the explosive composition of toy caps shall be packed in any inside container. These inner containers must be packed in outside containers complying with the following specifications:

(b) *Spec. 15A, 15B, 16A, or 19A.* Wooden boxes, gross weight not to exceed 150 pounds. Spec. 12B, fiberboard boxes, gross weight not to exceed 65 pounds.

(c) *Toy paper caps* may be packed with nonexplosive or noninflammable articles provided the outside packages are marked as prescribed herein.

(d) *Toy paper caps* of any kind must not be packed with fireworks.

(e) *Marking.* Each outside package must be plainly marked "TOY CAPS—HANDLE CAREFULLY."

PACKING AND MARKING DANGEROUS ARTICLES OTHER THAN EXPLOSIVES

INFLAMMABLE LIQUIDS

100 An *inflammable liquid* is any liquid which gives off inflammable vapors (as determined by flash point from Tagliabue's open-cut tester, as used for test of burning oils) at or below a temperature of 80° F.

PACKING

101 (a) *Outage* for containers offered for transportation by carriers by rail freight, rail express, highway, or water must be as prescribed in sec. 101 (b) to 101 (j).

(b) The proper vacant space (outage) in a tank car or other shipping container depends on the coefficient of expansion of the liquid and the maximum increase of temperature to which it will be subjected in transit. Outage must be calculated to the total capacity of the container.

(c) Containers must not be entirely filled. Sufficient interior space must be left vacant to prevent leakage or distortion of containers due to the expansion of the contents from increase of temperature during transit.

(d) In packages containing alcohol, cologne spirits, high wines, or other distilled spirits of 150 proof or over, the vacant interior space must be the maximum permitted by the United States Internal Revenue regulations.

(e) Inflammable liquids must not be loaded into domes of tank cars.

(f) In tank cars, outage must be calculated to percentage of the total capacity of the tank, i. e., shell and dome capacity combined. If the dome of the tank car does not provide sufficient outage, then vacant space must be left in the shell to make up the required outage.

(g) The outage for tank cars must not be less than 2 percent.

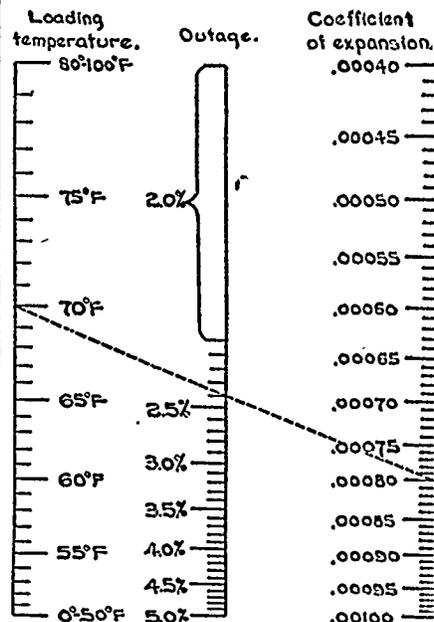
(h) An outage of 2 percent is frequently insufficient for light petroleum having a vapor pressure exceeding 16 pounds per square inch, absolute, at 100° F., owing to the fact that they ex-

pand more than heavier petroleum products when the temperature increases, and this rate of expansion varies with the specific gravity of the material. It is recommended, therefore, that when uninsulated tank cars are loaded with such inflammable liquids the outage in the tank shall be not less than as shown by the following chart:

(See sec. 108 (f) for outage for ethyl chloride.)

(See sec. 109 (g) for outage for ethylene oxide.)

(1) *Outage chart for inflammable liquids:*



Example: Suppose the temperature of the liquid at time of loading is 70° F. and its coefficient of expansion is 0.00080; lay a ruler on the chart running from 70° to 0.00080 as shown by the dotted line and the required outage is 2.4 percent where the ruler crosses the outage scale.

The following coefficients of expansion per degree Fahrenheit, of the principal inflammable liquids shall be used in determining outages:

Acetone	0.00085
Amyl acetate	.00088
Benzol (benzene)	.00071
Carbon bisulfide	.00070
Ether	.00098
Ethyl acetate	.00070
Ethyl (grain) alcohol	.00082
Methyl (wood) alcohol	.00072
Toluol (toluene)	.00063
Gasolene or naphtha:	
50-55° A. P. I. ¹	.00055
55.1-60° A. P. I. ¹	.00060
60.1-65° A. P. I. ¹	.00065
65.1-70° A. P. I. ¹	.00070
70.1-75° A. P. I. ¹	.00075
75.1-80° A. P. I. ¹	.00080
80.1-85° A. P. I. ¹	.00085
85.1-90° A. P. I. ¹	.00090

¹ A. P. I. (American Petroleum Institute), according to the following formula:

$$^{\circ}\text{A. P. I.} = \frac{141.5}{\text{specific gravity}} - 131.5$$

(j) For outage for tank motor vehicles, see Motor Carrier Safety Regulations, Revised, Part 7.

102. *Closing and cushioning.* All containers must be tightly and securely closed. Inside containers must be cushioned as prescribed, or in any case when necessary to prevent breakage or leakage.

103 (a) *Inflammable liquids* except carbon bisulfide (disulfide), ethyl chloride, ethylene oxide, nickel carbonyl, spirits of nitroglycerin in excess of one percent by weight, and zinc ethyl, in inside glass or earthenware containers not over 1 pint or 16 ounces by weight each, or inside metal containers not over 1 quart capacity each, packed in strong outside containers, except as otherwise provided, are exempt from specification packaging and labeling requirements for transportation by rail freight, highway, or by carrier by water.

(b) *Inflammable liquids*, except carbon bisulfide (disulfide), ethyl chloride, ethylene oxide, nickel carbonyl, spirits of nitroglycerin in excess of one percent by weight, and zinc ethyl, in inside containers not over 1 pint or 16 ounces by weight each, packed in strong outside containers, are exempt from specification packaging and labeling requirements for transportation by rail freight, rail express, highway, or by carrier by water.

104 (a) *Alcohol* must be packed as follows:

(b) In containers as prescribed in sec. 110 (a) and (b).

(c) Securely closed metal tanks of not exceeding 16 gallons capacity, made of metal not lighter than 20 gage, United States standard, packed in strong outside wooden boxes, may be used for the transportation of natural history or laboratory specimens preserved in alcohol, when shipped by or for the United States Government.

105 *Automobiles, motorcycles, tractors, or other self-propelled vehicles*, equipped with acetylene gas cylinders or gasoline or other fuel-tanks are exempt from specification packaging and labeling requirements provided such cylinders and tanks are securely closed. When offered for transportation by carriers by rail freight or highway, drainage of fuel tanks is not required. When offered for transportation by rail express, fuel tanks must have been drained and securely closed.

106 (a) *Carbon bisulfide (disulfide)* must be packed in specification containers as follows:

(b) *Spec. 11A or 11B.* Wooden barrels or kegs with glass, earthenware, or metal inside containers not over 5 pints capacity each.

(c) *Spec. 12B.* Fiberboard boxes with inside containers which must be: Glass or earthenware, not over 1 pint each, or metal cans, not over 1 quart each; outside containers not to exceed 65 pounds gross weight.

(d) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with inside metal con-

tainers, spec. 2A; or with inside glass or earthenware containers not over 5 pints capacity each.

(e) *Spec. 17E.* Metal drums (single-trip) not over 5 gallons capacity each.

(f) *Spec. 5, 5A, or 17C (single-trip).* Metal barrels or drums not over 55 gallons capacity each.

(g) Tank cars as prescribed in sec. 110 (a) (18). (See sec. 423 for shipping instructions.)

(h) *Carbon bisulfide (disulfide)* must not be offered for transportation by rail express.

108 (a) *Ethyl chloride* must be packed in specification containers as follows:

(b) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with glass, earthenware, or metal inside containers not over 1 pound capacity each.

(c) *Spec. 12B.* Fiberboard boxes with glass, earthenware, or metal inside containers not over 1 pound capacity each; outside containers not to exceed 65 pounds gross weight.

(d) *Spec. 5A.* Metal barrels or drums not over 33 gallons capacity each.

(e) Cylinders as prescribed for any compressed gas, except acetylene.

(f) Outage for all containers except lagged tank cars, must be 7.5 percent or more at 70° F. For lagged tank cars, 4 percent or more at 70° F.

(g) *Spec. 104A or ARA-IV-A.* Tank cars. See note 1, sec. 110 (c) (8). (See sec. 423 for shipping instructions.)

109 (a) *Ethylene oxide* must be packed in specification containers as follows:

(b) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with glass, earthenware, or metal inside containers not over 1 pound capacity each.

(c) Cylinders as prescribed for any compressed gas, except acetylene.

(d) *Spec. 12B.* Fiberboard boxes with glass, earthenware, or metal inside containers not over 1 pound capacity each.

Outside containers not to exceed 65 pounds gross weight.

(e) *Spec. 5A.* Metal barrels or drums not over 33 gallon capacity each.

(f) *Spec. 104A or ARA-IV-A.* Tank cars. See note 1, sec. 110 (c) (8). (See sec. 423 for shipping instructions.)

(g) Outage must be sufficient to prevent tank car from becoming entirely filled with liquid at 105° F.

110 *Inflammable liquids*, with vapor pressure (Reid° test) not over 16 pounds per square inch, absolute, at 100° F., other than those for which special requirements are prescribed herein, must be prepared for shipment in specification containers as follows (see sec. 110 (c) for high pressure liquids and sec. 110 (d) for viscous liquids):

*American Society for Testing Materials Tentative Method of Test for Vapor Pressure of Petroleum Products (Reid Method) (D-323-38T).

(a) (1) *For any inflammable liquid with flash point 20° F. or below:*

(a) (2) *Spec. 1A or 1C.* Carboys, glass, boxed or in barrels or kegs, capac-

ity not over 5 gallons. Must be closed, and when reused must be reconditioned and tested, as provided in the specification.

(a) (3) *Spec. 5, 5A, 5C, or 5G.* Metal barrels or drums.

(a) (4) *Spec. 17E.* Metal drums (single-trip), not over 5 gallons capacity, without opening except bunghole not exceeding 2.3 inches in diameter.

(a) (5) *Spec. 17C.* Metal drums (single-trip).

(a) (6) *Spec. 10A.* Wooden barrels or kegs.

(a) (7) *Spec. 11A or 11B.* Wooden barrels or kegs with inside containers which must be: Glass or earthenware, not over 1 gallon each; pails, kits, or metal cans; not over 2 gallons each.

(a) (8) *Spec. 12B.* Fiberboard boxes with inside containers which must be: Glass or earthenware, not over 1 quart each; metal cans, not over 1 gallon each. Packages containing glass or earthenware must not weigh over 65 pounds gross.

(a) (9) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with inside containers which must be: Glass or earthenware, not over 1 gallon each, except that inside containers up to 3 gallons each are authorized when only one inside container is packed in each outside container; or pails, kits, or metal cans, not over 10 gallons each.

(a) (10) *Spec. 21A.* Fiber drums with a single inside glass, earthenware, or metal container of not over 1 gallon capacity in each drum. Inside container must be so cushioned at top, sides, and bottom, as to prevent breakage or leakage in transit.

(a) (11) *Spec. 42B or 42C.* Aluminum barrels or drums.

(a) (12) *Cylinders* as prescribed for any compressed gas, except acetylene.

(a) (13) *Spec. 103, 104, 104A, ARA-II, ARA-III, ARA-IV, or ARA-IV-A.* Tank cars; manhole closures must be so designed that pressure will be released automatically by starting the operation of removing the manhole cover. (See sec. 423 for shipping instructions.)

(a) (14) The use of special aluminum tank cars for test service is also provided for by I. C. C. authority in docket 3665 dated November 5, 1937, and February 1, 1939, for the shipment of gasoline, ethyl acetate, acetone, methanol, or butyraldehyde.

(a) (15) The use of special combination flat and tank car is also provided for by I. C. C. authority in docket 3335 dated November 5, 1921, for the shipment of gasoline in local, noninterchange freight service on McCloud River Railroad.

(b) (1) *For any inflammable liquid with flash point above 20° to 80° F.:*

(b) (2) Containers as specified in sec. 110 (a) and also the following:

(b) (3) *Spec. 5B.* Metal barrels or drums.

(b) (4) *Spec. 17E.* Metal drums (single-trip).

(b) (5) *Spec. 10B.* Wooden barrels or kegs.

(b) (6) *Spec. 12B.* Fireboard boxes with inside containers which must be: Glass, earthenware, or metal, not over 1 gallon each. Packages containing inside glass or earthenware containers must not weigh over 65 pounds gross nor contain more than 4 such inside containers if their capacity is greater than 5 pints each.

(b) (7) *Spec. 12E.* Fiberboard box with a single square metal inside container of not over 5 gallons capacity.

(c) (1) *Inflammable liquids* for which other special packing requirements are not prescribed herein, must be shipped, depending upon their Reid* vapor pressure as follows:

*American Society for Testing Materials Tentative Method of Test for Vapor Pressure of Petroleum Products (Reid Method) (D-323-38T).

(c) (2) When the vapor pressure does not exceed 16 pounds per square inch, absolute, at 100° F. as prescribed in sec. 110 (a) and (b).

(c) (3) When the vapor pressure exceeds 16 pounds per square inch, absolute, at 100° F., but does not exceed 27 pounds per square inch, absolute, at 100° F., inflammable liquids must be packed in specification containers as follows:

(c) (4) As prescribed in sec. 110 (a) (2) to (a) (12), except spec. 10A and 17E. Bung labels required, for metal barrels and drums, as prescribed in sec. 110 (c) (13).

(c) (5) *Spec. 103, 104, 104A, ARA-II, ARA-III, ARA-IV; or ARA-IV-A.* Tank cars. Must be equipped with manhole closures, identification marks, and dome placards as prescribed in sec. 110 (c) (9), (c) (10), (c) (11) and (c) (12). (See note 1.)

(c) (6) When the vapor pressure exceeds 27 pounds per square inch, absolute, at 100° F., but does not exceed 40 pounds per square inch (see note 2), absolute, at 100° F., inflammable liquids must be packed in specification containers as follows:

(c) (7) *Spec. 5 or 5A.* Metal barrels or drums. Bung labels required as prescribed in sec. 110 (c) (13).

(c) (8) *Spec. 104A or ARA-IV-A and 104 or ARA-IV under the conditions prescribed in sec. 110 (c) (9), (c) (10), (c) (11), (c) (12), and note 3.* Tank cars. (See note 1.)

NOTE 1: Tanks built in compliance with American Railway Association Specifications for class IV-A tank cars authorized for use effective October 1, 1925, may be continued in service for the transportation of ethyl chloride and other liquids which do not have a vapor pressure exceeding 28 pounds per square inch, gage pressure, at 100° F., provided there is stenciled on each side of the tank immediately below the valve protecting housing the words "Liquids having vapor pressure exceeding 28 pounds per square inch at 100° F. must not be loaded into this tank" in letters and figures at least 1 inch high. These tank cars must be retested as prescribed in current spec. 104A, except that safety valves must open at pressure not exceeding 35 pounds, and be vapor tight at 28 pounds per square inch.

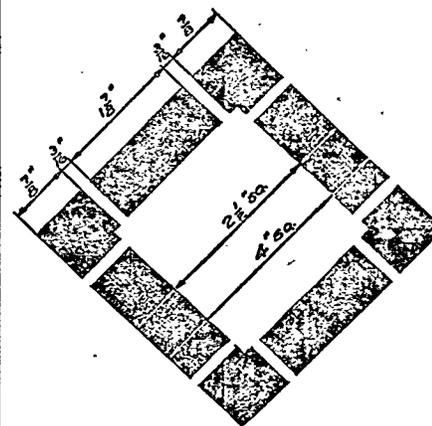
NOTE 2: When the vapor pressure exceeds 40 pounds per square inch, absolute, at 100°

F., these inflammable liquids are classed as inflammable compressed gases and must be described, packed, and shipped as prescribed for such articles.

NOTE 3: *Spec. 104 or ARA-IV* tank cars are authorized provided that they are equipped with approved fittings designed to provide for the loading, unloading, gaging, sampling, and taking temperature of the contents without removing the manhole closure; that safety valves are set to open at pressure of 35 pounds (with a tolerance of plus or minus 3 pounds), and are vapor tight at 28 pounds per square inch, gage pressure; that bottom discharge outlets are of the same type as authorized for specification 104 tank cars; and that there is stenciled on each side of the tank above the specification mark, in letters and figures at least 1 inch high, "For vapor pressures not exceeding 40 pounds per square inch, absolute, at 100° F."

(c) (9) Tank cars prescribed in sec. 110 (c) (5) and (c) (8) must have their manhole closures equipped with approved safeguards making removal of closures from manhole openings practically impossible while car interior is subjected to vapor pressure of lading. These cars, with the exception of spec. 104A and ARA-IV-A, must be stenciled on each side of dome in line with the ladders, and in a color contrasting to the color of the dome, with the identification mark illustrated below:

(c) (10) *Manhole closure identification mark*
(Reduced Size)



(c) (11) *Dome placard.* Tank cars, except 104A and ARA-IV-A, loaded with materials described in sec. 110 (c) (3) and (c) (6) must, in addition to the "Dangerous" placard, be protected by special dome placards, at least 4 1/4" x 10 1/2", with legible wording as follows:

DOME PLACARD
(Reduced Size)
(Black printing on white)

10 1/2 Inches
4 1/4 Inches
AVOID ACCIDENTS
DO NOT REMOVE THIS DOME COVER
WHILE GAS PRESSURE EXISTS IN TANK
KEEP LIGHTED LANTERNS AWAY

NOTE: For tank car equipped with both inner and outer manhole covers, and when removal of inner cover is not necessary to

unload the car, the word "inner" may be substituted for the word "this" in the dome placard.

(c) (12) Dome placards must be applied as follows: One on each side of dome and one on the top near the manhole in line with the ladders. Dome placards may be of white paper securely pasted to the dome, or of strong tag board for use in suitable holders; or the wording of the dome placard may be stenciled on the dome of car and remain thereon as long as it is used in the service which requires these special placards.

(c) (13) *Bung label.* Inflammable liquids as described in sec. 110 (c) (3) and (c) (6), shipped in metal drums or barrels, in addition to the standard red caution label prescribed herein, must be labeled near the bung with a white rectangular label or tag measuring 5 by 3 inches, bearing the following wording:

BUNG LABEL
(Reduced Size)
(Black printing on white)

5 Inches
CAUTION Unscrew This Bung SLOWLY
Do not unscrew entirely until all interior pressure has escaped through the loosened threads.
REMOVE BUNG IN OPEN AIR. Keep all open flame lights and fires away. Inclosed Electric Lights are safe.

Viscous Inflammable Liquids

(d) (1) Inflammable liquids having a viscosity as determined by one of the following methods, must be shipped in specification containers as prescribed in this section:

(d) (2) The viscosity of the liquids must be determined in a Stormer viscosimeter with an actuating weight of 400 grams and with the liquid maintained at a temperature of 28° C. The cylinder of the viscosimeter must be immersed in the liquid.

(d) (3) For transparent liquids the sample may be tested in a vertical glass tube, 1 inch inside diameter by approximately 13 inches long, having two marks 10 inches apart engraved thereon, the lower mark being 2 inches above the bottom of the tube; the liquid to be tested shall be poured into the tube until its surface rises one-half inch above the upper mark and must be maintained at a temperature of 28° C. during the test; a polished steel ball one-fourth inch in diameter shall be supported one-half inch above the surface of the liquid at the center of the tube and dropped therein.

(d) (4) When the speed of the cylinder in the first test does not exceed 10 revolutions per 13 seconds, or the time required in the second test for the steel ball to fall the vertical distance between the two lines upon the glass tube is not less than 4 seconds the material is classed as "viscous."

(d) (5) *Viscous inflammable liquids* must be prepared for shipment in containers as follows:

(d) (6) As prescribed in sec. 110 (a) and (b).

(d) (7) *Spec. 6A, 6B, or 6C.* Metal barrels or drums.

(d) (8) *Spec. 37D.* Metal drums (single-trip) not over 5 gallons with welded side seams.

111 (a) *Nickel carbonyl* must be packed in specification cylinders as prescribed for any compressed gas, except acetylene.

(b) *Nickel carbonyl* must not be offered for transportation by rail express.

112 (a) *Nitrocellulose or collodion cotton, fibrous, or nitrostarch, wet with alcohol or a solvent, must contain at least 30 percent by weight of alcohol or a solvent with flash point not lower than 30° F.; colloided nitrocellulose, granular or flake, and lacquer base or lacquer chips, wet with alcohol or a solvent, must contain at least 20 percent by weight of alcohol or a solvent with flash point not lower than 30° F.; must be packed in specification containers as follows:*

(b) Containers, except tank cars, as prescribed in sec. 110.

(c) *Spec. 6A, 6B, 6C; or 37D single-trip not over 5 gallons capacity.* Metal barrels or drums.

(d) *Spec. 30 (obsolete).* Wooden boxes, metal-lined.

(e) *Spec. 35 (obsolete).* Wooden barrels with removable heads.

(f) Gross weight of any container must not exceed 450 pounds.

113 (a) *Paint, enamel, lacquer, stain, shellac, varnish, aluminum, bronze, gold, wood filler, liquid, and lacquer base liquid, and thinning, reducing and removing compounds therefor, and driers, liquid, therefor, must be packed in specification containers as follows:*

(b) As prescribed in sec. 110, according to flash point, pressure, or viscosity.

(c) *Spec. 37D.* Metal drums (single-trip) not over 5 gallons capacity with welded side seams, irrespective of flash point or viscosity.

(d) *Paint, enamel, lacquer, stain, shellac, varnish, aluminum, bronze, gold, wood filler, liquid, and lacquer base liquid, and thinning, reducing and removing compounds therefor, and driers, liquid, therefor, with flash point above 20° F., may, in addition to containers prescribed in sec. 113 (a), (b) and (c), be shipped in specification containers as follows:*

(e) *Spec. 10C.* Wooden barrels or kegs.

(f) *Paint, enamel, lacquer, stain, shellac, varnish, aluminum, bronze, gold, wood filler, liquid, and lacquer base liquid, and thinning, reducing and removing compounds therefor, and driers, liquid, therefor, in glass or earthenware containers of not over 1 quart capacity each, or metal containers not over 5 gallons capacity each, packed in strong outside containers are exempt from specification packaging and labeling require-*

ments for transportation by rail freight, highway, or by carrier by water. (See sec. 103 (b) for rail express exemptions.)

114 (a) *Polishes, metal, stove, furniture and wood, liquid, must be packed in specification containers as follows:*

(b) As prescribed in sec. 110, according to flash point, pressure, or viscosity.

(c) *Spec. 37D.* Metal drums (single-trip) not over 5 gallons capacity with welded side seams, irrespective of flash point or viscosity.

(d) *Polishes, metal, stove, furniture and wood, liquid, in glass or earthenware containers of not over 1 quart capacity each, or metal containers not over 5 gallons capacity each, packed in strong outside containers are exempt from specification packaging and labeling requirements for transportation by rail freight, highway, or by carrier by water. (See sec. 103 (b) for rail express exemptions.)*

115. *Refrigerating machines* assembled for shipment and containing not over 15 pounds of an inflammable liquid for their operation are exempt from specification packaging and labeling requirements.

116 (a) *Road asphalt, or tar, liquid, must be packed in specification containers as follows:*

(b) As prescribed in sec. 110, according to flash point, pressure, or viscosity.

(c) *Spec. 10C.* Wooden barrels or kegs, authorized only for material with flash point above 20° F.

117 (a) *Rubber cement* must be packed in specification containers as follows:

(b) As prescribed in sec. 110, except that spec. 10A or 10B, wooden barrels and kegs, must not be used.

(c) *Spec. 5B or 17E.* Metal barrels or drums irrespective of flash point or viscosity of cement shipped.

118 (a) *Spirits of nitroglycerin must consist of not over 10 percent by weight of nitroglycerin in ethyl alcohol and be packed in specification containers as follows:*

(b) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes lined with paraffined paper, spec. 2L, and with metal inside containers, securely closed with rubber stoppers tied in place. The inside containers must be entirely surrounded by at least 2 inches of dry, fine sawdust or kieselguhr. There must be not over 6 quarts of the mixture in each outside container.

(c) *Spirits of nitroglycerin* consisting of not over 1 percent by weight of nitroglycerin in ethyl alcohol, in addition to containers specified in sec. 118 (b), may be packed in specification containers as follows:

(d) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes, with glass inside containers not over 1 quart capacity each, cushioned by at least 2 inches of dry, fine sawdust or kieselguhr.

119 (a) *Zinc ethyl* must be shipped in cylinders as prescribed for any compressed gas, except acetylene.

(b) *Zinc ethyl* must not be offered for transportation by rail express.

INFLAMMABLE SOLIDS AND OXIDIZING MATERIALS

150 *An inflammable solid* is a solid substance other than one classified as an explosive, which is liable, under conditions incident to transportation, to cause fires through friction, through absorption of moisture, or through spontaneous chemical changes.

151 *An oxidizing material* is a substance such as a chlorate, permanganate, peroxide, or a nitrate, that yields oxygen readily to stimulate the combustion of organic matter.

Packing

152 (a) *Inflammable solids or oxidizing materials* must not be packed in the same outside container with corrosive liquids unless the corrosive liquids are in bottles, cushioned by incombustible absorbent material, in tightly closed metal containers.

Note: Oxidizing or other materials in quantity not exceeding 4 ounces, in securely closed metal cans, packed in the same compartment with other securely packed materials necessary for a complete fumigant, are acceptable for transportation.

(b) *Closing and cushioning.* All containers must be tightly and securely closed. Inside containers must be cushioned as prescribed or in any case when necessary to prevent breakage or leakage.

153 (a) *Inflammable solids, and oxidizing materials* in inner containers not over 1 pound net weight each in outside containers not exceeding 25 pounds net weight each are exempt from specification packaging and labeling requirements, unless otherwise provided, for transportation by rail freight, highway, or by carrier by water. (See sec. 183 for exemptions for nitrates.)

(b) *Inflammable solids and oxidizing materials, total weight not over 16 ounces in any outside package, unless otherwise provided, are exempt from specification packaging and labeling requirements for transportation by rail freight, rail express, highway, or by carrier by water. (See sec. 183 for exemptions for nitrates.)*

154 (a) The following articles in any quantity are not exempt from any of the provisions of these regulations:

(b) *Bags, nitrate of soda, empty and unwashed.*

(c) *Benzoyl peroxide.*

(d) *Burnt cotton.*

(e) *Calcium chlorite.*

(f) *Calcium phosphide.*

(g) *Charcoal, wood, screenings, except see sec. 162 (a) (5).*

(h) *Coal, ground bituminous, sea coal and coal facings.* See sec. 165.

(i) *Cobalt resinate, precipitated.*

(j) *Cotton waste, oily with more than 5 percent of vegetable or animal oil.*

(k) *Fiber, burnt.*

(l) *Fibers or fabrics impregnated or saturated with animal or vegetable oils*

which are liable to spontaneous heating or combustion in transit.

(m) *Fish scrap or fish meal* containing less than 6 or more than 12 percent moisture (does not include wet acidulated fish scrap with moisture 40 to 55 percent) or which has not been sufficiently cooled after manufacture, or is liable to spontaneous heating in transit.

(n) *Hair, wet.*

(o) *Iron sponge* that has not been properly oxidized during manufacture.

(p) *Matches, strike-anywhere.*

(q) *Motion-picture film (exposed), and motion-picture film scrap (nitrocellulose base).*

(r) *Motion-picture film old and worn out (nitrocellulose base).*

(s) *Paper stock, wet.*

(t) *Paper waste, wet.*

(u) *Phosphoric anhydride.*

(v) *Phosphorus, amorphous, red.*

(w) *Phosphorus pentachloride.*

(x) *Phosphorus, white or yellow.*

(y) *Photographic film scrap.*

(z) *Picric acid, wet, exceeding 16 ounces.*

(aa) *Potassium, metallic.*

(bb) *Pyroxylin plastic scrap.*

(cc) *Rags, oily, with more than 5 percent of vegetable or animal oil.*

(dd) *Rags, wet.*

(ee) *Sodium chlorite.*

(ff) *Sodium metallic.*

(gg) *Sodium peroxide.*

(hh) *Sodium picramate.*

(ii) *Spent iron mass or spent iron sponge.*

(jj) *Spent oxide.*

(kk) *Tankage, garbage, tankage fertilizers, containing less than 8 percent moisture or having a temperature exceeding 100° F. when loaded.*

(ll) *Tankage, rough ammoniate* (tankages made from ammoniates such as leather scrap, horns, hoofs, hair, hair waste, felt waste), containing less than 7 percent moisture or having a temperature exceeding 100° F. when loaded.

(mm) *Textile waste, wet.*

(nn) *Wool waste, wet.*

(oo) *X-ray film (exposed) and X-ray film scrap (nitrocellulose base).*

(pp) *Zirconium, metallic, dry, wet or sludge.*

(qq) *Zirconium picramate.*

155 (a) *Bags, nitrate of soda, empty and unwashed, must be packed in specification containers as follows:*

(b) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes.

(c) *Spec. 10A, 10B, 10C, 11A, or 11B.* Wooden barrels.

(d) These bags in carload and truckload lots loaded by consignor and to be unloaded by consignee may also be shipped loose or baled, provided the car or highway vehicle is lined with paper and doors of cars are properly stripped after sealing and provision is made on highway vehicle to prevent entrance of sparks.

156 (a) *Barium peroxide* must be packed as follows:

(b) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with inside glass containers not over 1 pound capacity each; or with inside metal containers or lining, spec. 2F.

(c) *Spec. 6A.* Metal barrels or drums. Gross weight not to exceed 880 pounds.

(d) *Spec. 6B or 6C.* Metal barrels or drums with not more than 1400 pounds net weight in each container.

(e) *Spec. 17E or 37D.* Metal drums (single-trip).

157 (a) *Benzoyl peroxide*, if in powdered or crystalline form, must be wet with at least 30 percent water by weight and be packed in specification containers as follows:

(b) *Spec. 15A, 15B, or 15C.* Wooden boxes, with inside containers or lining which must be: Metal containers or lining, spec. 2F; or aluminum drums of at least 16 gage U. S. standard, tightly sealed. Gross weight not over 200 pounds.

158 (a) *Benzoyl peroxide* in granular form may be shipped in dry condition when packed in specification containers as follows:

(b) *Spec. 15A or 15B.* Wooden boxes, with securely closed metal or fiber inside containers, not over 1 pound capacity each; net weight of the material not over 50 pounds in each box. Benzoyl peroxide shall not be considered granular if more than 25 percent passes through a 10-mesh sieve.

159 (a) *"Burnt cotton"* is cotton that has been on fire and from which the burnt portions have not been removed by repicking. It must not be offered for transportation until not less than 10 days have elapsed since the last evidence of fire in it. It must be marked and described on shipping orders and bills of lading as "Burnt Cotton, Yellow Label," and cars containing any quantity of it must be protected by the "Dangerous" placard.

(b) *Burnt cotton* must not be offered for transportation by rail express.

(c) When burnt cotton is picked and baled the separated cotton is not classed as a dangerous article and is not subject to this regulation.

160 (a) *Calcium chlorite and sodium chlorite* must be packed in specification containers as follows:

(b) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with inside containers which must be: Glass or earthenware not over 2½ pounds capacity each or metal not over 5 pounds capacity each.

(c) *Spec. 6A, 6B, 6C; also 17E or 37D (single-trip).* Metal barrels or drums.

161 (a) *Calcium phosphide* must be packed in specification containers as follows:

(b) *Spec. 15A or 15B.* Wooden boxes lined, spec. 2F, and with hermetically sealed inside containers.

(c) *Spec. 6A, 6B, or 6C.* Metal barrels or drums.

162 (a) (1) *Charcoal* as described in this paragraph is exempt from specifica-

tion packaging and labeling requirements for transportation by rail freight, highway, or by carrier by water. When offered for transportation by rail express charcoal, except charcoal briquettes, must be packed in barrels, bags, and boxes and must bear the yellow label.

(a) (2) *Charcoal, activated.*

(a) (3) *Charcoal, animal and bone.*

(a) (4) *Charcoal briquettes* made from wood charcoal with starch and water, or tar, for a binder, which have been screened and cooled to a temperature below 100° F., before being offered for transportation. Also exempt when offered for transportation by rail express.

(a) (5) *Charcoal screenings* made from "pinon" wood.

(a) (6) *Charcoal made from coconut shells, walnut shells, corn cobs, peach pits, and similar material*, must be cooled and held not less than five days before shipment, and shipped in bags, barrels, or boxes.

(a) (7) *Charcoal, lump*, made by the old kiln or pit method by which long air exposure is provided before shipment.

(a) (8) *Charcoal, wood*, except charcoal screenings, when packed in boxes or barrels.

(a) (9) *Charcoal, wood*, when in bags in less-than-carload or less-than-truckload shipments of not exceeding 2,000 pounds.

(b) (1) *Charcoal made in round retorts* must be transferred to air-tight metal cans for cooling, and must be kept in these cans for 24 hours or more. The charcoal after removal from these cans should be aired by spreading on a floor to a depth not exceeding 1 foot. This air exposure must last not less than 44 hours. Not less than 72 hours should elapse from the time the air exposure of the charcoal commences before a car loaded with it is closed for shipment, or before the lump charcoal is placed in paper bags.

(b) (2) The charcoal during this airing period must be protected from the weather, and exposed to good circulation of air. When the charcoal is aired on the floor for only 24 hours and then placed in burlap bags, it must be kept in the bags 60 hours before shipment. If the charcoal is not aired on the floor for at least 24 hours, it must be kept in the burlap bags for at least 96 hours before loading for shipment.

(b) (3) *Charcoal made in ovens in slatted cars* should be kept for two periods of 24 hours each in first and secondary air-tight cooling chambers respectively. After removing the charcoal from the secondary coolers it must be exposed to good air circulation, but protected from the weather for a period of not less than 44 hours.

(b) (4) Not less than 72 hours must elapse from the time the air exposure of the charcoal commences before a car loaded with it is closed for shipment, or before the lump charcoal is placed in paper bags.

(b) (5) When fire occurs in charcoal during air exposure period, it should be extinguished with as little water as possible. Any charcoal wet in this way or otherwise must be dried, by again heating in the retorts or ovens, and cooled and aired in the usual way described in sec. 162 (b) (1) to (b) (4), or the charcoal must be set aside and allowed to dry for not less than 30 days before shipment.

(b) (6) *Charcoal, lump*, must be dry and free from screenings and brands.

(b) (7) Shipments must be loaded in tight box cars, except that lump charcoal made from soft wood may be shipped in open or stock cars.

(b) (8) When a chute is used in loading the car, the chute must contain a properly constructed screen which must be kept clean. This screen must not be coarser than $\frac{3}{4}$ -inch mesh. Forks with prongs not less than 1 inch apart must be used instead of shovels to handle the charcoal. The screenings which accumulate in the doorway of the car must be removed before loading the doorway. The car should be swept before loading, and a car which has contained lime must be thoroughly cleaned before loading with charcoal. The doors of the car must be closed tightly before the car is forwarded.

(b) (9) *Lump charcoal* may be shipped in bags, barrels or boxes, or bulk in cars.

(b) (10) See Bureau of Motor Carriers Safety Regulations, Revised, Part 7, for loading on motor vehicles.

(b) (11) *Charcoal screenings*, except screenings made from "pinon" wood, must not be offered for transportation by rail express.

(b) (12) *Charcoal screenings* consist of small pieces of charcoal varying from about one-half inch in the maximum dimension to grains of dust. These screenings are more liable to produce fires than other forms of charcoal. Charcoal screenings from wet charcoal or wet screenings or screenings which have been wet must not be offered for shipment unless they have been dried for not less than 12 hours in a retort or oven, and then subjected to not less than 10 days airing and cooling before shipment.

(b) (13) Charcoal screenings must be stored in a dry place, in loosely piled cotton or jute bags, freely exposed to the air for not less than 20 days after separation from the lump before shipment.

(b) (14) Screenings from pine-wood charcoal must be stored as above described for not less than five days before shipment.

(b) (15) Charcoal screenings must be packed in cotton or jute bags of not greater than 4 bushels capacity.

(b) (16) *Charcoal ground, crushed, granulated, or pulverized* is prepared from either lump charcoal or screenings.

(b) (17) *Lump charcoal* used for this purpose must be stored subject to ventilation, and protected from the weather for not less than 20 days after its re-

moval from the coolers before milling; or the ground, crushed, granulated or pulverized charcoal must be stored in bags, subject to ventilation and protected from the weather for not less than 20 days before shipment. *Lump charcoal* made from *pine wood* must be stored as above described not less than 5 days before milling.

(b) (18) *Charcoal screenings* used for the preparation of ground, crushed, granulated, or pulverized charcoal must be stored in a dry place in loosely piled cotton or jute bags freely exposed to air for a period of not less than 20 days after separation from the lump charcoal, and before milling; or the ground, crushed, granulated, or pulverized charcoal must be stored in bags, subject to ventilation and protected from the weather for not less than 20 days before shipment. *Charcoal screenings* made from pine wood charcoal must be stored as above described not less than 5 days before milling.

(b) (19) (a) *Ground, crushed, granulated, or pulverized charcoal* must be packed as follows:

(b) (19) (b) In tight sift-proof wooden barrels or boxes containing not more than 4 bushels each; or in fiberboard boxes;

(b) (19) (c) Or in unlined jute bags, or in strong unlined cotton bags, containing not more than 4 bushels each;

(b) (19) (d) Or in paper-lined jute bags, or in paper bags, containing not more than $2\frac{1}{2}$ bushels each.

(b) (19) (e) Whenever practicable, all boxes, barrels, or bags, after filling, should be allowed to remain open and freely exposed to the air, and protected from the weather for not less than 24 hours before being closed. Ground, crushed, granulated, or pulverized charcoal made from pine-wood charcoal should be so stored for not less than 72 hours before the packages are closed.

(b) (20) *Charcoal, screenings or ground, crushed, granulated or pulverized charcoal*, in bags, when loaded in cars for shipment by rail must be so loaded that the bags are laid horizontally in the car, and so piled that there will be spaces for efficient air circulation. These spaces must not be less than 4 inches wide. If the bags are not compactly filled and closed so as to avoid free space within, transverse, wooden strips must be laid between the bags and extending the full width of the car; these strips should be approximately 2 feet apart vertically and longitudinally. The bags must not be piled closer than 6 inches from the top of the car, and no more than 20,000 pounds of screenings, ground, granulated, crushed, or pulverized charcoal, shall be loaded in a 36-foot, 6-inch car, 27,000 pounds in a 37-foot, 6-inch car, 23,000 pounds in a 38-foot, 6-inch car, 29,000 pounds in a 39-foot, 6-inch car, 36,000 pounds in a 40-foot, 6-inch car, and 40,000 pounds in a 50-foot, 6-inch car. A tight car must be used, and any loose material must be swept up and removed from

the doorway of the car before completing the loading. On recommendation of the Bureau of Explosives, other methods of loading shown to be at least equally efficient in securing the necessary ventilation will be authorized.

(b) (21) See Bureau of Motor Carriers Safety Regulations, Revised, Part 7, for loading in motor vehicles.

(b) (22) *Charcoal burned in pits or kilns* must be thoroughly cooled in the sealed kilns. After the kilns are opened, the charcoal must be allowed to stand in the open kiln or elsewhere exposed to the air for not less than 24 hours before loading in a freight car. Charcoal burned in kilns may be loaded in open cars or in box cars, but after loading in box cars, the cars must be allowed to stand not less than 24 hours with doors open before shipment.

(b) (23) *Screenings, or ground, crushed, granulated, or pulverized charcoal*, from pit or kiln burned charcoal, are considered as non-hazardous, provided the screenings or the material from which the ground charcoal is made has been exposed to the air for not less than 5 days prior to shipment or grinding.

(b) (24) *Reburned charcoal* must be cooled and exposed to good fresh-air circulation for not less than five days after removal from the reburning furnaces and before being shipped or ground to produce ground or pulverized charcoal.

163 (a) *Chlorate of soda, chlorate of potash, and other chlorates* must be packed in specification containers as follows:

(b) *Spec. 6A, 6B, or 6C (returnable)*. Metal barrels or drums.

(c) *Spec. 17E, 37D, 37E, or 37F (single-trip)*. Metal drums.

(d) *Spec. 21A, 22A, or 22B*. Fiber or plywood drums with inside metal drums, spec. 2F.

(e) *Spec. 15A, 15B, 15C, 16A, or 19A*. Wooden boxes or spec. 11A or 11B wooden barrels or kegs with tightly closed inside containers which must be of metal not over 10 pounds capacity each; or of glass not over 5 pounds each; or of fiber, spec. 2G, not over 6 pounds capacity each.

(f) *Spec. 12B*. Fiberboard boxes with inside metal cans not over 5 pounds capacity each, closed air tight and with not over 25 pounds of chlorate in the outside container.

(g) *Chlorates wet with 10 percent or more of water* are authorized for shipment in tank cars, spec. 103, when equally distributed therein.

164 (a) *Chromic acid* must be packed in specification containers as follows:

(b) *Spec. 6A, 6B, or 6C*. Metal barrels or drums.

(c) *Spec. 17E, 37D, or 37E (single-trip)*. Metal drums.

(d) *Spec. 15A or 15B*. Wooden boxes, with inside glass bottles of not greater than 5 pounds capacity each, with closures securely fastened, each bottle in-

dividually packed in a tight metal container, and cushioned therein with incombustible mineral packing material.

(e) *Spec. 15A or 15B.* Wooden boxes with tightly closed metal inside containers, not over 10 pounds capacity each.

165 (a) *Coal, ground bituminous, sea coal, coal facings*, 90 percent of which will pass through a 100-mesh sieve, must be stored for at least six days after grinding, or if not so stored must be shipped in tight metal tank cars or in tight metal containers on container cars, or in permanently covered metal hopper cars, or in other tight metal containers.

(b) *Coal, ground bituminous*, which has been dried by heating before grinding must be packed in hermetically sealed metal-lined wooden boxes or air-tight metal containers.

166 (a) *Cobalt resinate, precipitated*, must be packed in specification containers as follows:

(b) *Spec. 6A, 6B, or 6C.* Metal barrels or drums.

(c) *Spec. 17E, 37D, 37E, 37F, or 37G (single-trip).* Metal drums.

(d) *Spec. 15A or 15B.* Wooden boxes with air-tight metal inside containers.

167 (a) *Cotton waste*, oily with more than 5 percent of vegetable or animal oil must be packed as follows:

(b) In hermetically sealed metal-lined wooden boxes or air-tight metal containers.

(c) Such *cotton waste* must not be offered for transportation by carriers by rail express.

169 (a) *Fiber, burnt*, must be packed in hermetically sealed metal-lined wooden boxes or air-tight metal containers.

(b) Such *fiber* must not be offered for transportation by rail express.

170 (a) *Fibers or fabrics* impregnated or saturated with animal or vegetable oils which are liable to spontaneous heating or combustion in transit must be placed in hermetically sealed metal-lined wooden boxes or air-tight metal containers.

(b) Such *fibers or fabrics* must not be offered for transportation by rail express.

171 (a) *Fish scrap or fish meal* containing less than 6 or more than 12 percent moisture,* or which has not been sufficiently cooled after manufacture, or is liable to spontaneous heating in transit, must be packed in air-tight metal containers.

(b) Such *fish scrap or fish meal* must not be offered for transportation by rail express.

*Does not include wet acidulated fish scrap with moisture 40 to 55 percent.)

172 (a) *Hair, wet*, must not be offered for transportation except in gondola cars or in open motor vehicles with metal bodies.

(b) *Hair, wet*, must not be offered for transportation by carriers by rail express.

173 (a) *Inflammable solids and oxidizing materials*, as defined in secs. 150 and 151, other than those for which special requirements are prescribed must be

packed in specification containers as follows:

(b) *Spec. 6A, 6B, or 6C.* Metal barrels or drums.

(c) *Spec. 17E, 37D, 37E, or 37F.* Metal drums (single-trip).

(d) *Spec. 10A, 10B, or 10C.* Wooden barrels or kegs.

(e) *Spec. 11A.* Wooden barrels or kegs with inside containers or with suitable lining for bulk shipments.

(f) *Spec. 11B.* Wooden barrels or kegs with inside containers; or metal lined, spec. 2F, for bulk shipments.

(g) *Spec. 12B.* Fiberboard boxes with inside containers which must be: Metal cans; sliding-lid wooden boxes; fiber cans or boxes, spec. 2G, not over 5 pounds capacity each; or glass bottles not over 1 pound capacity each. Packages containing glass containers must not weigh over 65 pounds gross.

(h) *Spec. 15A or 15B.* Wooden boxes lined, spec. 2F or 2M.

(i) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with inside containers.

(j) *Spec. 21A.* Fiber drums.

(k) *Spec. 22A.* Plywood drums.

(l) *Spec. 22B.* Plywood drums with inside metal drums, spec. 2F.

174 (a) *Iron sponge* that has not been properly oxidized during manufacture must be packed in hermetically sealed metal-lined wooden boxes or air-tight metal containers.

(b) *Iron sponge* not properly oxidized must not be offered for transportation by carriers by rail express.

(c) *Spent oxide, spent iron mass, or spent iron sponge* must be loaded in open steel cars or open highway vehicles with steel bodies. After exposure to air for a period of not less than 10 days, these articles may be offered for transportation by carrier by water in bulk in all-steel barges having open holds.

(d) *Spent oxide, spent iron sponge, or spent iron mass* must not be offered for transportation by carrier by rail express.

175 (a) *Lacquer base, or lacquer chips, dry*, must be packed in specification containers as follows:

(b) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with inside metal containers, spec. 2F.

(c) *Spec. 6A, 6B, or 6C.* Metal barrels or drums.

(d) *Spec. 17E or 37D.* Metal Drums (single-trip).

176 (a) *Matches*, when offered for transportation, must be of a type that will not ignite spontaneously when subjected for eight consecutive hours to a temperature of 200° F., in a properly conducted laboratory test.

(b) For the purpose of these regulations, matches are divided into two classes, viz, (1) "strike-anywhere" and block matches and (2) "strike-on-box," book, and card matches. Strike-anywhere and block matches are those for the ignition of which a prepared surface is not required. Strike-on-box, book, and card matches are those matches intended to be ignited on a prepared sur-

face. Book and card matches may be fastened to a cover or folder, or the prepared match strips may not be so attached or covered.

(c) *Packing.* Matches, strike-anywhere, must not be packed in the same outside package with any other article.

(d) *Matches, strike-anywhere*, must be placed in individual containers consisting of an outer sliding shuck or cover and an inner holding tray or box. Individual containers consisting of a holding tray or box with a top that telescopes over the box may be used. Boxes of suitable "hang-up" type may also be used, if approved by the Bureau of Explosives. All match boxes, covers, and trays must be made of cardboard, wood, or metal except that paper wrappings may be used for block or card matches.

(e) Individual containers must be wrapped in paper with not more than 12 boxes or individual containers in each paper-wrapped package. These packages must be secured on the ends and on the lapping side with glue, or similar satisfactory adhesive, making each 12 boxes or less of matches a serviceably wrapped and well-secured package.

(f) No individual container (not including card or block matches) shall contain more than 700 strike-anywhere matches in any one container, box, or package. When more than 300 matches are packed in any individual container, box, or package, the matches must be arranged in two nearly equal portions with the heads of the two portions placed in opposite directions. All individual containers containing 350 or more matches must have placed over the matches a center holding or protecting strip made of cardboard, which can be scored or bent without fracture. This protecting strip shall be not less than 1¼ inches wide and shall be flanged down at least five-eighths inch on each end to hold the matches in position when the container is nested into the shuck or cover or withdrawn therefrom.

(g) (1) *Matches*, unless exempted in sec. 176 (k), when offered for transportation by carriers by rail freight, highway, or water must be packed in specification containers as follows:

(g) (2) *Spec. 15A.*—Wooden boxes, with inside containers; not over 100 pounds each.

(g) (3) *Spec. 12B or 12C.*—Fiberboard boxes with inside containers; not over 60 pounds each, except spec. 12B special boxes, not to exceed 45 pounds each.

(g) (4) The maximum number of match boxes contained in any one case shall be as follows:

Number of boxes	Nominal number of matches per box	Number of boxes	Nominal number of matches per box
½ gross.....	Not over 700.	12 gross....	Not over 100.
1 gross.....	Not over 600.	(Over 60,	
2 gross.....	Not over 400.	20 gross....	Under 100.
3 gross.....	Not over 300.	25 gross....	Not over 60.
5 gross.....	Not over 200.		

(h) All industrial containers of strike-anywhere matches when offered for transportation by rail express must be packed in a wooden box, spec. 15A, lined, spec. 2F. Gross weight not to exceed 50 pounds.

(i) *Marking.* Outside containers of strike-anywhere matches shall show the name of the importer, distributor, or manufacturer and the brand or trademark under which such matches are manufactured and distributed to the trade. The name shall be printed in English.

(j) In addition, and separate therefrom, all outside containers shall have plainly marked thereon the words "STRIKE-ANYWHERE MATCHES."

(k) (1) *Matches, strike-on-box, book and card,* in outside fiberboard or wooden boxes, or matches, strike-on-box, book and card when packed with noninflammable articles provided they are included in a tightly closed cardboard or fiberboard container, or are securely wrapped and packed so as to prevent accidental ignition, before being placed in the outside containers, are exempt from specification packaging and labeling requirements.

(k) (2) Each outside container shall be marked "BOOK MATCHES," "STRIKE-ON-BOX MATCHES," or "CARD MATCHES," as the case may be.

177 (a) *Motion-picture film** and *x-ray film* (nitro-cellulose base) (exposed) must be packed in specification containers as follows:

*Advertising matter must not be attached to outside of container. Slow burning (non-inflammable) motion-picture film is exempt (sec. 181 (b)), but when packed with inflammable film all requirements must be complied with as if all contents were inflammable film.

(b) *Spec. 32A or 32B.*—Metal cases.

(c) *Spec. 15A, 15B, or 15C.*—Wooden boxes with each reel in a tightly closed metal can; gross weight not over 200 pounds.

(d) *Spec. 12B.* Fiberboard boxes complying with par. 30 (a) of this specification; authorized for a single tightly closed inside metal can not over 2,000 feet of film. Taped closure authorized.

(e) *Spec. 12B.* 1-piece fiberboard boxes complying with par. 30 (b) of this specification; authorized only when each film is in a tightly closed metal film-reel can containing not over 2,000 feet (approximately) of film; cans to be adequately braced in center of box by fiberboard, at least 175-pound test, extending full depth of box. Gross weight not over 65 pounds. Closing of box must be effected by coating entire contact surfaces of flaps with efficient adhesive; stitched closure not authorized. Boxes that have been filled, shipped, and opened, are not authorized for reuse.

(f) *Spec. 32C.* Trunks with each film in standard metal film-reel can. Trunks to contain no material other than films in cans and projecting apparatus. The apparatus, as packed,

must not be capable of creating an electric current.

178 (a) *Motion-picture film, old and worn out (not scrap),* when shipped, must be no longer exhibitable (with value only for reclamation of material) and must be packed in specification containers as follows: (See secs. 195 and 196 for film scrap.)

(b) *Spec. 15A.* Wooden boxes lined, spec. 2F or 2M; gross weight not over 450 pounds.

(c) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with inside metal cans containing not over 1,000 feet of film; the cover of each can must fit tightly; gross weight not over 450 pounds.

(d) *Spec. 32A or 32B.* Metal boxes.

(e) *Spec. 32D.* Metal boxes net weight of film not over 250 pounds.

(f) *Spec. 6A, 8B, 6C, 6J, or 37E (single-trip).* Metal barrels or drums.

179 (a) *Motion-picture film, toy, of standard width (1 $\frac{3}{8}$ "'),* on metal reels, each containing 200 feet or less of film, when shipped must be inclosed in spark-proof metal cans packed in outside specification containers as follows:

(b) *Spec. 15A, 15B, or 15C.* Wooden boxes; maximum gross weight, 250 pounds. (See sec. 181 (d) for toy motion-picture film pieces.)

180 (a) *Motion-picture film and X-ray film, unexposed* (nitrocellulose base), when offered for transportation by rail express must bear the yellow label prescribed in sec. 404 (f) and must be packed in specification containers as follows:

(b) *Spec. 15A, 15B, 15C, or 16A.* Wooden boxes, provided it is in tight rolls of not over 3,000 feet; each roll must be in a tightly closed metal can with cover held in place by adhesive tape or paper. Gross weight not over 250 pounds.

(c) *Spec. 12B.* 1-piece fiberboard boxes complying with par. 30 (b) of this specification; authorized only when each film is in a tightly closed metal can with cover held in place by adhesive tape or paper and containing not over 2,000 feet (approx.) of film; interior packing required, of double-wall corrugated fiberboard pads at least 275-pound test, so arranged as to prevent can from touching the 6 faces of the box. Gross weight not over 75 pounds. Boxes that have been filled, shipped, and opened, are not authorized for reuse.

(d) *Motion-picture film and X-ray film, unexposed* (nitrocellulose base), are exempt from specification packaging and labeling requirements for transportation by rail freight, highway, or by carrier by water.

181 (a) *Motion-picture film* as follows is exempt from specification packaging and labeling requirements for rail freight, rail express, highway, or water transportation:

(b) *Motion-picture film and X-ray film, slow-burning (noninflammable),*

and old and wornout motion-picture film, slow-burning (noninflammable).

(c) *Motion-picture film scrap and X-ray film scrap, slow-burning (noninflammable).*

(d) *Motion-picture film, toy, pieces of,* exposed, of approximately $\frac{3}{4}$ inch by $1\frac{3}{8}$ inches in size and not to exceed 1,000 such pieces inclosed in a tightly closed metal box and packed with other articles.

(e) *Motion-picture outfits, toy,* consisting of one projecting apparatus and not to exceed one roll of motion-picture film 12 feet or less in length, may be accepted without further restrictions, provided the film is packed in a securely closed metal can or box, this inclosed in a wooden box and packed with the projection apparatus in an outside fiberboard, corrugated strawboard, or wooden box.

182 (a) *Nitrates,* when offered for transportation by carriers by rail freight, rail express, water, or highway, must be packed in containers as follows (see sec. 183 for exemptions):

(b) In bags.

(c) In bulk in tight cars or tight motor vehicles closed or covered, or freight vessels.

(d) In containers as prescribed in sec. 183.

NOTE.—Nitrate of soda in bulk (not in containers) in cars, and in bags may be shipped in the same car.

183 *Nitrate of aluminum, nitrate of ammonia nitrate of barium, nitrate of lead, nitrate of potash, nitrate of sodium* (nitrate of soda), *nitrate of strontia, nitro-carbo nitrate,* or other *inorganic nitrates:* In metal cans in outside fiberboard boxes, in wooden boxes, kegs, or barrels, metal cans, or drums, or calcium nitrate in bags, or ammonium nitrate in bags containing not over 125 pounds, net weight, made moisture proof, tight against sifting, and of strength not less than bags made of 8-ounce burlap, are exempt from specification packaging and labeling requirements.

184 (a) *Nitrocellulose or collodion cotton, wet, or nitrostarch, wet, or nitroguanidine, wet,* must be uniformly wet with at least 20 pounds of water to 80 pounds of dry material and must be packed in specification containers as follows:

(b) *Spec. 10A or 10B.* Wooden barrels or kegs.

(c) *Spec. 15A or 15B.* Wooden boxes, lined, spec. 2M.

(d) *Spec. 6A, 6B, or 6C.* Metal barrels or drums not over 55 gallons capacity.

(e) *Spec. 37D.* Metal drums (single-trip) not over 5 gallons capacity, welded side seams required.

(f) *Spec. 17E.* Metal drums (single-trip).

(g) *Spec. 30 (obsolete).* Wooden boxes, metal-lined.

(h) *Spec. 35 (obsolete).* Wooden barrels with removable heads.

(i) Gross weight of any container must not exceed 450 pounds.

185 (a) *Paper stock, wet*, must be packed in hermetically sealed metal-lined wooden boxes or airtight metal containers.

(b) *Paper stock, wet*, must not be offered for transportation by rail express.

186 (a) *Paper waste, wet*, must be packed in hermetically sealed metal-lined wooden boxes or airtight metal containers.

(b) *Paper waste, wet*, must not be offered for transportation by rail express.

187 (a) *Peroxide of sodium* must be packed in specification containers as follows:

(b) *Spec. 11A, 11B, 15A, 15B, 15C, 16A, or 19A*. Wooden barrels, kegs, or boxes, with inside containers which must be: Glass stoppered bottles, not to exceed 1 ounce net of material, each bottle inclosed in a metal can; or metal cans.

(c) *Spec. 6A, 6B, or 6C*. Metal barrels or drums.

(d) *Spec. 17E or 37D*. Metal drums (single-trip).

188 (a) *Phosphoric anhydride* must be packed in specification containers as follows:

(b) *Spec. 11A, 11B, 15A, 15B, or 15C*. Wooden barrels, kegs, or boxes, with inside containers which must be: Tightly stoppered glass bottles not over 1 pound capacity each; or metal cans, not over 3 pounds capacity each, hermetically sealed (soldered) or closed with cork securely held in place by metal strap soldered in position. All inside containers must be cushioned with elastic incombustible packing material.

(c) *Spec. 6A, 6B, or 6C*. Metal barrels or drums.

(d) *Spec. 17E or 37D*. Metal drums (single-trip).

189 (a) *Phosphorus, amorphous, red*, must be packed in specification containers as follows:

(b) *Spec. 15A or 15B*. Wooden boxes, with metal inside containers, with closures sealed air-tight and positively fastened.

190 (a) *Phosphorus, white or yellow*, when offered for transportation by carriers by rail freight, highway, or water may only be packed in water or dry.

(b) (1) *When placed in water* it must be packed in specification containers as follows:

(b) (2) *Spec. 15A, or 15B*. Wooden boxes with inside containers, which must comply with the following:

(b) (3) Hermetically sealed (soldered) metal cans, inclosed in other hermetically sealed (soldered) metal cans.

(b) (4) Hermetically sealed (soldered) metal cans, containing not over 1 pound each, inclosed in other, watertight, metal cans with screw-top closures.

(b) (5) Hermetically sealed (soldered) metal cans, inclosed in hermetically sealed (soldered) metal box lining, spec. 2F.

(b) (6) *Spec. 6A or 6B*. Metal barrels or drums, not over 30 gallons capacity each.

(b) (7) *Spec. 103*. Tank cars, without bottom discharge outlet and with approved insulation at least 4 inches in thickness, external heater coils, and dome fittings. The material must be immersed in water and must be loaded at a temperature not exceeding 140° F. and then cooled until the water has a temperature not exceeding 105° F. before car is offered to carrier. The water must be loaded in the dome to not more than 50 percent of the capacity of the dome.

(b) (8) After unloading, the tank must be filled to its entire capacity and the dome to not more than 50 percent of its capacity with water having a temperature not less than 105° F. and not over 140° F. before car is offered for return movement.

(c) (1) *Phosphorus, white or yellow*, when offered for transportation by rail express must be packed in water in specification containers as follows (also authorized for transportation by carriers by rail freight, highway, or water):

(c) (2) *Spec. 15A or 15B*. Wooden boxes with inside containers which must be: Hermetically sealed (soldered) metal cans, containing not over 1 pound each, inclosed in other, water-tight, metal cans with screw-top closures, or with soldered closures.

(c) (3) *Samples of phosphorus, white or yellow*, not to exceed 4 ounces each, placed in water in sealed metal cylinders or cans, inclosed in a wooden box, spec. 15A or 15B, may be transported only when consigned to the laboratory of the Internal Revenue Bureau or to the Hygienic Laboratory of the Public Health Service, Washington, D. C.

(d) (1) *Phosphorus, white or yellow*, when dry must be cast solid and shipped in containers as follows:

(d) (2) *Spec. 6A, 6B, or 6C*. Metal barrels or drums not over 30 gallons capacity each.

(d) (3) In projectiles or bombs when shipped by, for, or to the War or Navy Department of the United States Government without bursting elements.

(e) *Phosphorus, white or yellow, when dry* must not be offered for transportation by rail express.

191 (a) *Phosphorus pentachloride* must be packed in specification containers as follows:

(b) *Spec. 11B, 15A, 15B, 15C, 16A, or 19A*. Wooden barrels, kegs, or boxes, with inside containers which must be: Glass or glazed earthenware containers, not over 25 pounds capacity each, cushioned with mineral packing; when inside containers are packed in the same outside container with other articles or when they are less than 10 pounds capacity each they must also be inclosed in tightly closed metal cans. Net weight of phosphorus pentachloride not over 50 pounds in each outside container.

(c) *Spec. 6A, 6B, 6C, or 37D (single-trip)*. "Black iron" metal barrels or drums.

(d) *Spec. 10A*. Wooden barrels or kegs asphaltum lined.

(e) *Spec. 28A*. Metal-jacketed lead carboys.

192 *Picrate of ammonia (ammonium picrate) and picric acid, wet with not less than 10 percent water*, in quantity not exceeding 16 ounces in one outside package, may be shipped as drugs, medicines, or chemicals, when in glass bottles securely stoppered, each bottle inclosed in a strong fiber carton properly cushioned in the outside shipping case. No restrictions other than packing prescribed by this section are required when these materials are offered for transportation.

193 (a) *Picric acid wet with not less than 10 percent water* must be packed in specification containers as follows:

(b) *Spec. 15A*. Wooden box with inside containers of tightly closed glass or earthenware, cushioned, in outside container. The net weight in an outside package must not exceed 25 pounds dry weight. (See sec. 61 (f) (5) for shipment of wet picric acid in excess of 25 pounds, and sec. 192 for exemption up to 16 ounces.)

195 (a) *Pyroxylin plastic scrap, photographic film scrap, X-ray film scrap, motion-picture film scrap, or pieces of exposed or unexposed film*, when offered for transportation by carrier by rail freight, highway, or water must be packed in specification containers as follows:

(b) *Spec. 15A or 15B*. Wooden boxes lined, spec. 2F or 2M; gross weight not over 450 pounds each.

(c) *Spec. 6A, 6B, 6C, 6J; or 37E (single-trip)*. Metal barrels or drums.

(d) *Spec. 11B*. Wooden barrels or kegs with paper bags, spec. 2J, as inside containers of the material; gross weight not over 375 pounds.

196 (a) *Pyroxylin plastic scrap, photographic film scrap, X-ray film scrap, motion-picture film scrap, or pieces of exposed or unexposed film*, except samples for laboratory examination, must not be offered for transportation by rail express.

(b) (1) *Samples for laboratory examination* when offered for transportation by rail express must be packed in specification containers as follows:

(b) (2) *Spec. 15A, 15B, or 15C*. Wooden boxes with inside metal container, hermetically sealed by soldering or with tape. Net weight not over 25 pounds; shipments must be marked "Sample of (name of article) for laboratory examination."

197 (a) *Pyroxylin plastics, in sheets, rolls, rods, or tubes* containing nitrocellulose is not subject to these regulations when offered for transportation by carriers by rail freight or highway but when offered for transportation by carriers by rail express or water must be packed in specification containers as follows and must bear the yellow label:

(b) *Spec. 15A, 15B, or 19A*. Wooden boxes.

(c) *Spec. 12B*. Fiberboard boxes.
(d) Sheets, rolled, in fiber drums, spec. 21A, having 2 straps applied length-

wise and 1 or more circumferentially; straps at least $\frac{1}{2}$ by 0.02 inch steel; or

(e) Sheets, rolled, not over 15 pounds net weight in fiber tubes lined throughout with singlefaced corrugated fiberboard at least 0.2 inch thick and securely closed; tube material at least 0.115 inch thick for side walls and 0.05 inch thick for ends with strength, Mullen or Cady test, at least 245 and 220 pounds respectively; metal ends for tubes acceptable when lined with fiber discs at least 0.05 inch thick.

198 *Pyroxylin plastics* in manufactured articles or articles made therefrom is not subject to these regulations.

199 (a) *Rags, oily*, with more than 5 percent of vegetable or animal oil, must be packed in hermetically sealed metal-lined wooden boxes, or air-tight metal containers.

(b) *Rags, oily*, as described above, must not be offered for transportation by rail express.

200 (a) *Rags, wet*, must be packed in hermetically sealed metal-lined wooden boxes, or air-tight metal containers.

(b) *Rags, wet*, must not be offered for transportation by rail express.

201 (a) *Rubber scrap*, without cotton or fabric insertion, if ground, powdered, or granulated, and the rubber content of which exceeds 45 percent, as determined by subtracting the sum of the percentage of ash and the percentage of acetone from 100, and *rubber buffings* from any grade of rubber, irrespective of the percentage of rubber content, must be packed in specification containers as follows (see sec. 202 for rubber scrap, not ground):

(b) *Spec. 6A, 6B, or 6C*. Metal barrels or drums.

(c) *Spec. 15A*. Wooden boxes lined, spec. 2F or 2M.

202 *Rubber scrap, not ground*, is not subject to these regulations.

203 (a) *Rubber shoddy, regenerated rubber, or reclaimed rubber*, must be packed in specification containers as follows:

(b) *Spec. 6A, 6B, or 6C*. Metal barrels or drums.

(c) *Spec. 15A*. Wooden boxes lined, spec. 2F or 2M.

(d) When in the form of dense homogeneous nonporous sheets or rolls, the sheets of thickness of one-eighth inch or greater, packed flat or in rolls, the material is nonhazardous and not subject to these regulations.

204 (a) *Sodium hydrosulfite* must be packed in specification containers as follows:

(b) *Spec. 11A, 11B, 15A, 15B, 15C, 16A, or 19A*. Wooden barrels, kegs, or boxes with inside glass bottles of capacity not exceeding 5 pounds each, or metal containers.

(c) *Spec. 6A, 6B, or 6C*. Metal barrels or drums.

(d) *Spec. 17E, 37D, 37E, or 37F*. Metal drums (single-trip).

(e) *Spec. 21A*. Fiber drums with inside metal drums.

(f) *Spec. 22B*. Plywood drums with inside metal drums.

205 (a) *Sodium picramate* must be wet with not less than 20 percent of water by weight and packed in specification containers as follows:

(b) *Spec. 15A, 15B, 15C, 16A, or 19A*. Wooden boxes with well stoppered glass inside containers of not exceeding 1 quart capacity each, cushioned in the boxes.

(c) *Spec. 10A or 10B*. Wooden barrels, or kegs.

206 (a) (1) *Sodium or potassium, metallic*, must be packed in specification containers as follows:

(a) (2) *Spec. 15A or 15B*. Wooden boxes, with hermetically sealed (soldered) metal inside containers.

(a) (3) *Spec. 6A, 6B, or 6C*. Metal barrels or drums.

(a) (4) *Spec. 17E or 37D*. Metal drums (single-trip) authorized only for sodium which must be fused solid in the container.

(b) (1) *Sodium or potassium, metallic*, immersed in neutral oil may also be shipped when packed in specification containers as follows:

(b) (2) *Spec. 15A or 15B*. Wooden boxes with glass inside containers, each inclosed in a tin container.

(c) (1) *Sodium, metallic*, may also be shipped when packed in specification container as follows:

(c) (2) *Spec. 105A300*. Tank cars, having exterior heater coils fusion welded to tank shell and properly stress-relieved, the material to be in molten condition when loaded into the tank and allowed to solidify before car is offered to carrier.

207 (a) (1) *Sulfide of sodium or sulfide of potassium, fused or concentrated, when ground*, must be packed in specification containers as follows:

(a) (2) *Spec. 15A, 15B, 15C, or 16A*. Wooden boxes with inside containers which must be: Glass bottles inclosed in tightly closed metal cans, or hermetically sealed (soldered) metal cans.

(a) (3) *Spec. 6A, 6B, or 6C*. Metal barrels or drums.

(a) (4) *Spec. 12B*. Fiberboard boxes, with inside containers which must be: Hermetically sealed (soldered) metal cans of not over 5 pounds capacity.

(b) (1) When fused or concentrated, but not ground (may be chipped, flaked or broken), may be shipped in specification containers as follows:

(b) (2) *Spec. 15A, 15B, or 15C*. Wooden boxes with inside bottles of not more than 5 pounds capacity each, or metal cans, with tight covers.

(b) (3) *Spec. 12B*. Fiberboard boxes with inside containers which must be: Metal cans of not over 5 pounds net weight each or glass bottles of not over 1 pound net weight each. Packages containing glass or earthenware containers must not weigh over 65 pounds gross.

(b) (4) *Spec. 17E, 37D, 37E, 37F, or 37G*. Metal drums (single-trip).

(b) (5) *Spec. 6A, 6B, or 6C*. Metal barrels or drums.

(c) *Sulfide of potassium, crystallized*, is not subject to these regulations.

(d) *Sodium sulfide* when shipped fused in one solid mass in a metal barrel or drum and *sodium sulfide, crystallized*, are not subject to these regulations.

209 (a) *Tankage, garbage, and tankage fertilizers*, containing less than 8 percent moisture or having a temperature exceeding 100° F. when loaded, must be packed in hermetically sealed metal-lined wooden boxes or air-tight metal containers.

(b) Such *tankage, garbage, and tankage fertilizers*, must not be offered for transportation by rail express.

210 (a) *Tankages, rough ammoniate* (tankages made from ammoniates such as leather scrap, horns, hoofs, hair, hair waste, felt waste), containing less than 7 percent moisture or having a temperature exceeding 100° F. when loaded, must be packed in hermetically sealed metal-lined wooden boxes or air-tight metal containers.

(b) *Tankages, rough ammoniate*, must not be offered for transportation by rail express.

211 (a) *Textile waste, wet*, must be packed in hermetically sealed metal-lined wooden boxes or airtight metal containers.

(b) *Textile waste, wet*, must not be offered for transportation by rail express.

212 *Trinitrobenzene and trinitrotoluene, wet with not less than 10 percent water*, in quantity not exceeding 16 ounces in one outside package, may be shipped as drugs, medicines, or chemicals, when in glass bottles securely stoppered, each bottle inclosed in a strong fiber carton properly cushioned in the outside shipping case and are not subject to any other requirement of these regulations.

213 (a) *Wool waste, wet*, must be packed in hermetically sealed metal-lined wooden boxes or air-tight metal containers.

(b) *Wool waste, wet*, must not be offered for transportation by rail express.

213A (a) *Zinc ammonium nitrite* must be packed in specification containers as follows:

(b) *Spec. 6A, 6B, 6C*. Metal barrels or drums.

(c) *Spec. 17E or 37D*. Metal drums, single trip. Gross weight not over 300 pounds.

214 (a) *Zirconium, metallic, wet or sludge*, must be packed in specification containers as follows:

(b) *Spec. 15A or 15B*. Wooden boxes with inside containers of screw-cap type metal cans, spec. 2A, containing not over 8 pounds net each. Gross weight of such outside packages must not exceed 150 pounds each.

(c) *Spec. 10A*. Wooden kegs containing not to exceed 75 pounds net each.

215 (a) *Zirconium, metallic, dry*, must be packed in specification containers as follows:

(b) *Spec. 15A or 15B*. Wooden boxes with inside metal containers, tightly and

securely closed by push-in covers held in place by soldering at least at four points, or in screw-cap type metal cans. Inside containers must not exceed 10 pounds net each. Gross weight of outside packages must not exceed 75 pounds each.

216 (a) *Zirconium picramate* must be wet with not less than 20 percent of water by weight and packed in specification containers as follows:

(b) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with well stoppered glass inside containers of not exceeding 1 quart capacity each, cushioned in the boxes.

(c) *Spec. 10A or 10B.* Wooden barrels or kegs.

ACIDS AND OTHER CORROSIVE LIQUIDS

240 *Acids and other corrosive liquids* are strong mineral acids or other corrosive fluids which are liable to cause fire when mixed with chemicals or with organic matter, or are liable, in case of leakage, to damage other freight materially.

Packing

241 (a) Outage for containers of acids or other corrosive liquids for transportation by carriers by rail freight, rail express, highway, or water, (except tank motor vehicles covered by Motor Carrier Safety Regulations, Revised, Part 7), must be as follows:

(b) Containers must not be entirely filled. Sufficient interior space must be left vacant to prevent leakage or distortion of containers due to the expansion of the contents from increase of temperature during transit.

(c) The proper vacant space (outage) in a tank car or other shipping container depends on the coefficient of expansion of the liquid and the maximum increase of temperature to which it will be subjected in transit. Outage must be calculated to the total capacity of the container.

(d) Acids and other corrosive liquids must not be loaded into domes of tank cars.

(e) In tank cars, outage must be calculated to percentage of the total capacity of the tank, i. e., shell and dome capacity combined. If the dome of the tank car does not provide sufficient outage, then vacant space must be left in the shell to make up the required outage.

(f) The outage for tank cars must not be less than 1 percent.

242 (a) Bottles containing acid or other corrosive liquids, as defined by these regulations, must not be packed in the same outside container with any other article, except as specifically provided herein.

(b) When bottles containing acid or other corrosive liquids are cushioned by incombustible absorbent material and securely packed in tightly closed metal containers, except hydrofluoric acid which must be packed in a container other than a metal container, they may be packed

with other articles. This exception does not apply to nitric or perchloric acids, which must not be packed in the same outside container with any other article under any circumstances.

243 *Closing and cushioning.* All containers must be tightly and securely closed. Inside containers must be cushioned as prescribed or in any case when necessary to prevent breakage or leakage.

244 (a) Acids and other corrosive liquids in quantity not exceeding 1 pound bottles each inclosed in a metal can in the outside package are exempt from specification packaging and labeling requirements unless otherwise provided, for transportation by rail freight, highway, or by carrier by water.

(b) Other exemptions from specification packaging and labeling requirements for rail freight and highway transportation and exemptions from specification packaging and labeling requirements, when authorized for articles offered for transportation by rail express carrier, are shown with the packing requirements for the article.

245 (a) The following articles in any quantity, except as otherwise specified are not exempt from any of the provisions of these regulations:

(b) *Acid sludge.*

(c) *Bromine.*

(d) *Chloroacetyl chloride.*

(e) *Dimethyl sulfate.*

(f) *Electrolyte or alkaline battery fluid packed with storage batteries, battery charges, or radio current supply devices.*

(g) *Hydrofluoric acid, anhydrous.*

(h) *Nitrating (mixed) acid.*

(i) *Nitric acid.*

(j) *Phosphorus oxychloride.*

(k) *Phosphorus tribromide.*

(l) *Phosphorus trichloride.*

(m) *Spent acid (sulfuric or mixed).*

(n) *Sulfur chloride.*

(o) *Less than carload and less than truckload shipments of wet storage batteries.*

246 (a) *Acids or other corrosive liquids*, as defined in sec. 240, *other than those for which special requirements are prescribed*, must be packed in specification containers as follows:

(b) *Spec. 1A, 1B, or 1C.* Carboys in boxes or kegs which must be closed, and when reused must be reconditioned and tested, as provided in the specification.

(c) *Spec. 5A.* Metal barrels or drums.

(d) *Spec. 10A.* Wooden barrels or kegs; these containers must be asphalt lined.

(e) *Spec. 11A or 11B.* Wooden barrels or kegs with inside containers which must be: Glass or earthenware, not over 2 gallons each.

(f) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with inside containers which must be: Glass or earthenware, not over 1 gallon each, except that inside containers up to 3 gallons are authorized when only one is packed in each outside container.

(g) *Spec. 28.* Metal-jacketed lead carboys.

247 (a) *Acetyl chloride, antimony pentachloride, benzoyl chloride, benzyl chloride, pyro sulfuric chloride, silicon chloride, sulfur chloride (mono and di), tin tetrachloride (anhydrous), and titanium tetrachloride*, must, except as indicated, be packed in specification containers as follows:

(b) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with glass or earthenware inside containers not over 1 gallon each, except that inside containers up to 3 gallons each are authorized when only one is packed in an outside container.

(c) *Spec. 11A or 11B.* Wooden barrels or kegs, with glass or earthenware inside containers not over 2 gallons each.

(d) *Spec. 1A or 1C.* Glass carboys in boxes or kegs (not permitted for tin tetrachloride, anhydrous).

(e) *Spec. 5A.* Metal barrels or drums.

(f) *Spec. 103A.* Tank cars except that for tin tetrachloride (anhydrous) spec. 105A300 tank cars must be used.

(g) *Spec. 5H.* Metal barrels or drums, lead-lined, authorized for benzyl chloride only.

(h) Sulfur chloride packed in glass or earthenware bottles or carboys must be cushioned in the outside container by means of incombustible elastic packing material of such nature that a mixture of the liquid and the packing material will not cause fires or heating.

248 (a) *Acid sludge, sludge acid, spent sulfuric acid, or spent mixed acid*, resulting from the use of sulfuric acid in various processes, except when containing hydrofluoric acid, which will not corrode interior of tank cars at sufficiently rapid rate to cause leakage during transportation, must be packed in specification containers as follows:

(b) *Spec. 1A.* Boxed carboys. (For spent sulfuric acid only.)

(c) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with inside containers which must be: Glass or earthenware, not over 1 gallon each, except that inside containers up to 3 gallons are authorized when only one is packed in each outside container.

(d) *Spec. 103A.* Tank cars, provided the product is sufficiently liquid to be unloaded through the dome.

(e) *Spec. 103.* Tank cars, provided the product is too viscous to be unloaded through the dome.

249 (a) *Alkaline corrosive liquids, n. o. s., and alkaline battery fluids* when offered for transportation by carriers by rail freight, highway, or water must be packed in specification containers as follows:

(b) In containers prescribed in sec. 246.

(c) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with glass or earthenware inside containers, not over 2 gallons each, or with metal inside containers, not over 5 gallons each.

(d) *Spec. 5 or 5A.* Metal barrels or drums.

(e) *Spec. 103 or 103A.* Tank cars.

(f) *Alkaline corrosive liquids, n. o. s., and alkaline battery fluids* when offered for transportation by rail express must be packed in specification containers as follows:

(g) *Spec. 15C, 16A, or 19A.* Wooden boxes with inside containers of earthenware or glass vessels, capacity 1 gallon or less, well stoppered and well cushioned with excelsior, hay, straw, or other equally effective cushioning material.

(h) *Spec. 15C, 16A, or 19A.* Wooden boxes with inside containers of metal cans, capacity 2 gallons or less.

(i) *Spec. 5 or 5A.* Metal barrels or drums, capacity 10 gallons or less.

(j) *Spec. 12B.* Fiberboard container with inside containers of glass bottles, capacity 16 ounces, well stoppered and well cushioned with excelsior or other equally effective cushioning material. Not more than one bottle may be packed in an outside container.

250 (a) (1) *Automobiles or other self-propelled vehicles* equipped with charged electric storage batteries, or with charged electric storage batteries removed from vehicles; and charged electric storage batteries when included in carload or truckload shipments of automobile parts or assembly material are exempt from specification packaging and labeling requirements as follows:

(a) (2) When batteries are removed from automobiles and loaded into car or motor vehicle therewith, the batteries must be so loaded, blocked, and braced in car as to prevent movement therein during transit, and the load must be so arranged that loose articles cannot come into contact with the batteries.

(a) (3) When batteries are shipped with automobile parts or assembly material, the batteries must be boxed or crated and so loaded, blocked, and braced in the car or motor vehicle as to prevent movement therein during transit, and the load must be so arranged that loose articles cannot come into contact with the batteries.

251 (a) *Boron trichloride* must be packed in specification containers as follows:

(b) Cylinders as prescribed for any compressed gas, except acetylene.

252 (a) *Bromine* must be packed in specification containers as follows:

(b) *Spec. 15A or 15B.* Wooden boxes with glass inside containers not over 1 quart each; or with stone or earthenware jugs not over 1 gallon each.

(c) *Spec. 5H.* Lead-lined metal barrels or drums not over 10 gallons each.

(d) Outage (vacant space above liquid) for inside containers must be not less than 15 percent of capacity of container.

(e) For other authorized containers an outage of not less than 10 percent is required.

(f) Inside containers must be closed by glass, earthenware, or stone stoppers ground to fit and securely fastened; or bottles may have necks with molded screw threads which must be closed by threaded-type caps with lead or other efficient bromine-resistant gaskets and cushioned by elastic material to insure tight closure. Sealed glass ampoules are also authorized.

(g) Bottles or jugs must be securely cushioned on all sides with incombustible packing material, such as whiting, mineral wool, infusorial earth (Ideselguhr), sifted ashes, powdered china clay, or similar material, at least 1 inch thick, which will not produce heat when mixed with bromine. The use of hay, sawdust, excelsior, or other organic material, either treated or untreated, as a cushioning or packing material, is prohibited.

(h) Not more than 15 quarts of bromine in bottles, nor more than 12 quarts in jugs, may be packed in one box.

253 (a) *Chloroacetyl chloride* must be packed in specification containers as follows:

(b) *Spec. 15A or 15B.* Wooden boxes, with inside glass containers not over 5 pints capacity each, cushioned with incombustible material.

(c) *Spec. 28.* Metal-jacketed lead carboys.

(d) *Spec. 5H.* Lead-lined metal barrels or drums.

254 (a) *Chlorosulfonic acid* and mixtures of *chlorosulfonic acid-sulfur trioxide* must be packed in specification containers as follows:

(b) *Spec. 5A or 5C.* Metal barrels or drums.

(c) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes, with inside containers which must be: Glass or earthenware, not over 1 gallon each, except that inside containers up to 3 gallons are authorized when only one is packed in each outside container.

(d) *Spec. 11A or 11B.* Wooden barrels, with inside glass or earthenware containers not over 2 gallons each.

(e) *Spec. 103A.* Tank cars.

255 (a) *Dimethyl sulfate* must be packed in specification containers as follows:

(b) *Spec. 5A.* Metal barrels or drums not over 55 gallons each.

(c) *Spec. 5.* Metal barrels or drums not over 15 gallons each, inclosed in strong crates made of lumber at least $\frac{5}{8}$ inch thick.

(d) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with each box containing a single glass inside container not over 1 quart capacity, closed by ground glass stopper securely fastened in place, and cushioned with incombustible absorbent material in hermetically sealed (soldered) metal can, the can then being cushioned with incombustible cushioning material in the outside container.

257 (a) *Electrolyte (acid)* must not be over 47 percent strength (39° Baumé). *Electrolyte or corrosive battery fluid*

must be packed in specification containers as follows:

(b) As prescribed in sec. 272 except that unlined tank cars and metal barrels or drums must not be used.

(c) *Spec. 43A.* Rubber drums.

(d) When the material is alkaline it may also be shipped when packed in containers as prescribed in sec. 249.

258 (a) *Electrolyte, acid, or alkaline corrosive battery fluid, packed with storage batteries* must be in specification containers as follows:

(b) *Spec. 15D or 16B.* Wooden boxes with inside containers of glass bottles not over 1 gallon each nor over 2 gallons total in each outside container. Inside containers must be well cushioned and separated from batteries by a strong solid wooden partition.

259 (a) *Electrolyte, acid, or alkaline corrosive battery fluid, packed with battery charger or radio current supply device, or parts thereof, with only one device or outfit in each such package,* may be shipped in specification containers as follows:

(b) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes provided the liquid is in bottles securely closed and cushioned and separated from charger supply device, and parts by a strong solid wooden partition.

(c) *Spec. 12B.* Fiberboard box when the liquid is in a strong, 8-fluid-ounce or smaller bottle securely closed and cushioned. Not more than 12 such packages may be packed under the provisions of sec. 25.

260 (a) (1) *Electric storage batteries containing electrolyte, acid, or alkaline corrosive battery fluid,* must be completely protected so that short circuits will be prevented; they must not be packed with other articles except electrolyte or corrosive battery fluid as provided in sec. 258, or portable searchlights properly cushioned. They must be packed in specification containers as follows:

(a) (2) *Spec. 15D or 16B.* Wooden or wirebound wooden boxes except as provided in sec. 260 (b).

(b) (1) *Electric storage batteries* with case of impregnated rubber, asphaltum composition, wooden-battery-box type; composition, wooden-battery-box type, or steel-case type; packing authorized as follows:

(b) (2) 1 to 3 batteries not over 20 pounds each in outside box, gross weight not over 75 pounds; specification container not required.

(b) (3) 1 battery not over 75 pounds each; no packing restrictions except when more than 1 battery is placed in an outside container.

(b) (4) When the height of a battery is more than twice its width the battery must be boxed or crated, with extension poles, feet, or pyramid bases securely fitted to the bottom to prevent tipping.

(c) *Electric storage batteries, containing electrolyte or corrosive battery fluid,*

of the nonspillable type, protected against short circuits and completely and securely boxed are exempt from specification packaging and labeling requirements.

(d) Carload or truckload shipments of electric storage batteries containing electrolyte or battery fluid, loaded or braced to prevent damage in transit and short circuits are exempt from specification packaging and labeling requirements.

261 (a) (1) *Fire-extinguisher charges* consisting of sulfuric acid in glass inside containers not over 5 pints each securely closed may be packed with bicarbonate of soda in specification containers as follows:

(a) (2) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with glass inside containers not over 5 pints each, cushioned.

(b) (1) *Fire-extinguisher charges* as described in the following paragraphs are exempt from specification packaging and labeling requirements:

(b) (2) *Fire-extinguisher charges*, consisting of sulfuric acid in strong 8-fluid-ounce or smaller bottles, securely closed and packed with bicarbonate of soda in outside fiberboard or wooden boxes.

(b) (3) *Fire-extinguisher charges*, consisting of chlorosulfonic acid in a hermetically sealed bottle not exceeding 2 ounces capacity, securely packed in a metal container inclosed in another metal container, the inner metal container being cushioned in the outer metal container with asbestos fabric and the completed package embedded in potassium carbonate in outside fiberboard or wooden boxes.

(b) (4) *Fire-extinguisher charges*, consisting of sulfuric acid in 10-ounce or smaller bottles, securely closed, packed in a tight fiber carton. The bottle and carton packed in either potassium carbonate or potassium carbonate and alkali packed in a cylindrical tin can, with slip cover, secured by tape in outside fiberboard or wooden boxes.

261A (a) *Formic acid* must be packed in specification containers as follows:

(b) In containers prescribed in sec. 246.

(c) *Spec. 103CW.* Tank cars stenciled "FOR FORMIC ACID ONLY."

262 (a) *Hydrobromic acid* must not be over 48 percent strength, and must be packed in specification containers as follows:

(b) *Spec. 1A or 1C.* Carboys in boxes, barrels or kegs.

(c) *Spec. 11A or 11B.* Wooden barrels or kegs with glass or earthenware inside containers, not over 2 gallons each.

(d) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with inside containers which must be: Glass or earthenware, not over 1 gallon each, except that inside containers up to 3 gallons are authorized when only one is packed in each outside container.

(e) *Spec. 43A.* Rubber drums. Any such container showing evidence of damage must be tested to 20 pounds hydro-

static pressure, without leakage, before using.

263 (a) (1) *Hydrochloric (muriatic) acid and hydrochloric acid mixtures* must be packed in specification containers as follows:

(a) (2) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with glass or earthenware inside containers not over 1 gallon each, except that inside containers up to 3 gallons each are authorized when only one is packed in each outside container.

(a) (3) *Spec. 5D.* Rubber-lined metal barrels or drums. Any such container that shows evidence of damage must be tested, before shipment, for defect in lining in the manner prescribed in spec. 5D.

(a) (4) *Spec. 43A.* Rubber drums.

(a) (5) *Spec. 11A or 11B.* Wooden barrels or kegs with glass or earthenware inside containers not over 2 gallons each.

(a) (6) *Spec. 1A or 1C.* Carboys in boxes or kegs.

(a) (7) *Spec. 10A.* Rubber-lined wooden barrels or kegs.

(a) (8) *Spec. 103B, 108, or 108A.* Tank cars.

(b) (1) *Hydrochloric acid* of not over 20 percent strength (13.25° Baumé) and other corrosive liquids containing not over 20 percent hydrochloric acid in addition to containers prescribed in sec. 263 (a) may be shipped in specification container as follows:

(b) (2) *Spec. 10A.* Asphaltum-lined wooden barrels or kegs.

(c) When hydrochloric acid contains oils or solvents it must not be shipped in containers or tank cars lined with rubber.

264 (a) *Hydrofluoric acid* must be packed in specification containers as follows:

(b) The vacant space in containers of these acids must be sufficient so that when raised to a uniform temperature of 130° F. the vapor pressure shall not exceed 6 pounds per square inch. This does not apply to anhydrous hydrofluoric acid.

(c) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with inside containers of India rubber, ceresine, or lead. Lead containers are authorized for acid not over 65 percent strength.

(d) *Spec. 11A or 11B.* Wooden barrels or kegs with inside containers of India rubber, ceresine, or lead. Lead containers are authorized for acid not over 65 percent strength.

(e) *Spec. 28.* Metal-jacketed lead carboys. Authorized for acid not over 65 percent strength.

(f) *Spec. 1B.* Boxed lead carboys. Authorized for acid not over 65 percent strength.

(g) *Spec. 5E.* Lead-lined metal barrels or drums not over 55 gallons each. Authorized for acid not over 65 percent strength.

(h) (1) *Spec. 5A.* Unlined metal barrels or drums which have been subjected

to adequate passification or neutralization process (see note). Authorized only for acid of not less than 60 percent strength. If containers are washed out with water, they must be repassified before reshipment.

NOTE: Each drum, before being put into this service, must be passified by the following or an equally efficient method: By filling drum to 90 percent of capacity with hydrofluoric acid of 58 percent strength and allowing drum to stand 48 hours at a temperature of 80° F., and then 7 hours at 140° F., the internal pressure being maintained at atmospheric pressure by means of a ventilated bung.

(h) (2) When offered for transportation in carload shipments they must be loaded by consignor and unloaded by consignee, and containers must be filled to not over 90 percent of capacity.

(h) (3) For less-than-carload shipments, containers must be of metal at least as heavy as 14 gage, United States standard, for not over 20 gallons capacity each, or 12 gage for not over 55 gallons capacity each, tested before each shipment by interior pressure of at least 30 pounds per square inch, be filled to not over 80 percent of capacity, held for at least 8 hours after filling and be vented just before shipment.

(i) *Spec. 103A, 104A, 105A, or ARA-IV-A.* Unlined metal tank cars, which have been subjected to adequate passification or neutralization process. (See note to sec. 264 (h) (1).) Authorized only for acid of 60 to 80 percent strength. If tanks are washed out with water, they must be repassified before reshipment.

(j) *Spec. 43A.* Rubber drums. Authorized only for acid not over 65 percent strength. Any such container showing evidence of damage must be tested to 20 pounds hydrostatic pressure, without leakage, before using.

(k) *Spec. 5D.* Rubber-lined metal barrels or drums. Authorized only for acid not over 40 percent strength. Any barrel or drum that shows evidence of damage must be tested before shipment for defect in lining in the manner prescribed in spec. 5D.

(l) *Spec. 103B.* Tank cars, rubber-lined tanks. Authorized only for acid not over 40 percent strength.

(m) *Spec. 10A.* Asphaltum-lined wooden barrels. Authorized only for acid not over 30 percent strength.

(n) *Spec. 108 or 108A.* Wooden tanks. Authorized only for acid not over 30 percent strength. All tanks must be lined with asphaltum or other suitable material which will remain in a plastic condition and not be subjected to destruction by the lading.

(o) (1) *Hydrofluoric acid, anhydrous* (hydrogen fluoride) must be shipped in specification containers as follows:

(o) (2) *Spec. 3, 3A, 3B, 3C, 4, 4A, 25 and 38, also 4B and 4C if not brazed.* Cylinders.

(o) (3) *Spec. 104A, 105A, or ARA-IV-A type.* Tank cars.

265 (a) (1) *Hydrofluosilicic acid* must be packed in specification containers as follows:

(a) (2) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with inside containers of India rubber or ceresine.

(a) (3) *Spec. 11A or 11B.* Wooden barrels or kegs with inside containers of India rubber or ceresine.

(a) (4) *Spec. 10A.* Asphaltum-lined wooden barrels or kegs.

(a) (5) *Spec. 108 or 108A.* Wooden tanks. Tanks must be lined with asphaltum or other suitable material which will remain in a plastic condition and not be subject to destruction by the lading.

(b) (1) *Hydrofluosilicic acid of not exceeding 40 percent strength* may also be shipped when packed in specification containers as follows:

(b) (2) *Spec. 5D.* Rubber-lined metal barrels or drums. Any barrel or drum that shows evidence of damage must be tested before shipment for defect in lining in the manner prescribed in *spec. 5D.*

(b) (3) *Spec. 43A.* Rubber drums. Any drum showing evidence of damage must be tested to 20 pounds hydrostatic pressure, without leakage, before using.

(b) (4) *Spec. 103B.* Tank cars, rubber-lined tanks.

(c) (1) *Hydrofluosilicic acid containing no free hydrofluoric acid or other ingredient that will attack glass*, may also be shipped when packed in specification containers as follows:

(c) (2) *Spec. 1A or 1C.* Carboys, boxed or in kegs, for which the use of rubber stoppers and gaskets is also authorized.

(c) (3) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with inside glass containers, not over 1 gallon each, with rubber or ground-in glass stoppers properly secured.

(c) (4) The vacant space in containers of these acids must be sufficient so that when raised to a uniform temperature of 130° F. the vapor pressure shall not exceed 6 pounds per square inch.

266 (a) (1) *Hydrogen peroxide (hydrogen dioxide) containing over 7.41 percent (25-volume) H₂O*, must be packed in specification containers as follows:

(a) (2) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with glass or earthenware inside containers of not more than 1 gallon capacity each. Inside containers must be well cushioned. All material used for cushioning must be incombustible mineral matter, such as whiting, mineral wool, infusorial earth, asbestos, or sifted ashes. Cushioning of inside containers in outside wooden boxes by means of elastic packing, such as wooden strips or large corks fastened securely in position, is authorized if the completed package will pass the swing test prescribed for box carboys in *spec. 1A.*

(a) (3) *Spec. 1A.* Glass carboys. The cushioning must be incombustible mineral material, elastic wooden-strip packing, or large elastic cushions such as corks fastened securely in position. The use

of hay, excelsior, ground cork, or similar material, whether treated or untreated, is prohibited. The carboy stoppers must be vented so as to prevent accumulation of internal pressure; use of cork gasket impregnated with paraffin is authorized.

(a) (4) *Spec. 34B.* Aluminum carboys.

(a) (5) *Spec. 42D.* Aluminum drums with vented closure in top head; not over 30 gallons capacity. Closure must be sealed to prevent removal in transit and top head plainly marked "KEEP THIS END UP." Aluminum drums already in service for the transportation of this material, manufactured prior to April 24, 1934, and of at least equal strength and efficiency thereto, may be continued in use until further order of the Commission.

(b) (1) *Hydrogen peroxide (hydrogen dioxide) containing not to exceed 10 percent H₂O, by weight* may also be shipped when in specification containers as follows:

(b) (2) *Spec. 10A.* Wooden barrels, paraffin-lined.

(c) Shipments of *hydrogen peroxide, all strengths*, in tank cars or tank motor vehicles, are not subject to these regulations.

267 (a) (1) *Mixed acid (nitric and sulfuric acid) (nitrating acid)*, when offered for transportation by carriers by rail freight, highway, or water must be packed in specification containers as follows:

(a) (2) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with inside glass bottles not over 7 pounds capacity each, individually inclosed in tightly closed metal cans and cushioned therein with incombustible mineral material.

(a) (3) *Spec. 5A.* Metal barrels or drums. (See *sec. 267 (a) (5).*)

(a) (4) *Spec. 103A.* Tank cars. (See *sec. 267 (a) (5).*)

(a) (5) *Mixtures of sulfuric acid and nitric acid (nitrating acid)*, shipped in tank cars, cargo tanks, tank trucks, or metal barrels or drums, shall contain not less than 10 percent H₂SO₄.

These mixtures may contain:

Up to 10 percent H₂O with not less than 10 percent H₂SO₄.

Up to 15 percent H₂O with not less than 15 percent H₂SO₄.

Up to 20 percent H₂O with not less than 20 percent H₂SO₄.

Up to 38 percent H₂O with not less than 62 percent H₂SO₄.

(a) (6) *Spec. 1A or 1C.* Carboys in boxes or kegs. Authorized only for mixed nitric and sulfuric acid containing not over 17 percent nitric acid and containing at least 33 percent water. Straight-sided carboys must be used; cushioning must be incombustible mineral material, elastic wooden-strip packing, or large elastic cushions, such as cork, fastened securely in position. The use of hay, excelsior, ground cork, or similar material, whether treated or untreated, is prohibited.

(b) (1) *Mixed acid (nitric and sulfuric acid) (nitrating acid)*, when offered for transportation by rail express must be packed in specification containers as follows (also authorized for transporta-

tion by carriers by rail freight, highway, or water):

(b) (2) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with inside glass bottles with glass stoppers ground to fit, and these stoppers must be held in place by plaster of Paris covered by strong cloth securely tied. Glass bottles having necks with molded screw threads, must be closed by threaded-type acid-resistant plastic caps. Caps must be equipped with an elastic composition cushion and with glass, porcelain or similar liner which must be impervious to the acid. Such caps, when secured in place by at least one complete continuous thread, must be capable of preventing any leakage of the liquid.

(b) (3) Or glass bottles having necks with molded screw threads must be closed by threaded-type acid-resistant caps. Caps must be lined with a resilient liner which must be impervious to the acid. Such caps, when secured in place by at least one complete continuous thread, must be capable of preventing any leakage of the acid.

(b) (4) Each bottle must be placed in a tightly closed metal container and well cushioned therein on all sides with incombustible mineral packing material, such as whiting, mineral wool, infusorial earth (kieselguhr), asbestos, sifted ashes, or powdered china clay, etc. The metal container must be packed in the outside container, and well cushioned by incombustible mineral packing material as herein described.

(b) (5) Not more than 3½ pounds (1¼ quarts) of mixed acid may be shipped in one outside package.

268 (a) *Nitric acid* in any quantity must not be packed with any other article.

(b) When offered for transportation by carriers by rail freight, highway, or water it must be packed in specification containers as follows:

(c) (1) *Spec. 15A, 15B, 15C, 16A, 19A, 11A, or 11B.* Wooden boxes, barrels and kegs with inside containers as follows (see *sec. 268 (h) and (i)*):

(c) (2) Glass bottles not over 5 pints capacity each, individually inclosed in tightly closed metal cans and cushioned therein with sufficient incombustible mineral material are required for nitric acid exceeding 1.49 (47.75° Baumé).

(c) (3) Glass bottles not over 5 pints capacity each; authorized only for nitric acid of specific gravity not exceeding 1.49 (47.75° Baumé).

(d) *Spec. 1A or 1C.* Carboys in boxes or kegs; authorized only for acid not over 1.43 specific gravity (43.61° Baumé). Straight-sided carboys must be used. Cushioning must be incombustible mineral material, elastic wooden-strip packing, or large elastic cushions, such as cork, fastened securely in position. The use of hay, excelsior, ground cork, or similar material, whether treated or untreated, is prohibited.

(e) *Spec. 5C.* Metal barrels or drums. Authorized only for nitric acid contain-

ing not over ½ percent hydrochloric acid nor over 5 percent sulfuric acid. Containers weighing less than 85 percent of their original marked weight are not authorized.

(f) *Spec. 42B or 5X; also 42, if made and marked prior to Oct. 1, 1930.* Aluminum drums, or aluminum-lined steel drums. Authorized only for acid over 1.46 specific gravity (45.75° Baumé). The acid shall not contain more than 0.1 percent of hydrochloric acid, more than 1 percent of sulfuric acid, or more than a trace of any of the lower oxides of nitrogen.

(g) (1) *Spec. 103C.* Tank cars. Authorized only for acid containing not more than 1 percent of sulfuric acid (H₂SO₄) and not more than 0.1 percent of hydrochloric acid (HCl).

(g) (2) The use of special aluminum alloy tank cars for test services is also provided for by I. C. C. authority in docket 3668 dated November 14, 1939, and June 7, 1940, for the shipment of 95 percent or greater HNO₃.

(h) (1) *Closures for bottles.* Required as follows:

(h) (2) Glass stoppers ground to fit and held in place by plaster of Paris covered by a strong cloth securely tied;

(h) (3) Or, threaded-type acid-resistant caps with a gasket or lining impervious to the acid and sufficiently resilient, or cushioned, to give an acid-proof closure; at least 1 complete continuous thread is required to be engaged when bottle is closed for shipment.

(i) (1) *Cushioning inside containers.* Inside containers must be well cushioned. All material for cushioning must be incombustible mineral material, such as whiting, mineral wool, infusorial earth, asbestos, sifted ashes, etc. The use of hay, excelsior, ground cork, or similar material, whether treated or untreated, is prohibited. Where the cushioning material is very fine or powdery, separate partitions for the individual inside containers should be provided to prevent the bottles from shifting and coming into contact with each other, and the box must be tight to prevent sifting of cushioning material.

(i) (2) Cushioning of inside containers in outside specification wooden boxes by means of elastic packings, such as wooden strips or large corks fastened securely in position, is authorized if the completed package will pass the swing test prescribed for boxed carboys, in spec. 1A.

(j) (1) *Nitric acid*, when offered for transportation by rail express, must be packed in specification containers as follows (also authorized for transportation by carriers by rail freight, highway, or water):

(j) (2) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with inside glass bottles with glass stoppers ground to fit, and these stoppers must be held in place by plaster of paris covered by strong cloth securely tied. Glass bottles having necks with molded screw threads;

must be closed by threaded-type acid-resistant plastic caps. Caps must be equipped with an elastic composition cushion and with glass, porcelain or similar liner which must be impervious to the acid. Such caps, when secured in place by at least one complete continuous thread, must be capable of preventing any leakage of the liquid.

(j) (3) Or glass bottles having necks with molded screw threads must be closed by threaded-type acid-resistant caps. Caps must be lined with a resilient liner which must be impervious to the acid. Such caps, when secured in place by at least one complete continuous thread, must be capable of preventing any leakage of the acid.

(j) (4) Each bottle must be placed in a tightly closed metal container, and well cushioned therein on all sides with incombustible mineral packing material, such as whiting, mineral wool, infusorial earth (kieselguhr), asbestos, sifted ashes, or powdered china clay, etc. The metal container must be packed in outside containers, and well cushioned by incombustible mineral packing material as herein described.

(j) (5) Not more than 7 pounds (2½ quarts) of nitric acid may be shipped in one outside package.

269 (a) *Perchloric acid* in excess of 72 percent must not be shipped. When not exceeding 72 percent strength must be packed in specification containers as follows:

(b) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with glass inside containers consisting of glass bottles not over 7 pounds capacity each cushioned with incombustible mineral material in amount sufficient to absorb the acid.

(c) *Spec. 1A or 1C.* Carboys.

(d) Cushioning for carboys must be incombustible mineral material, elastic wooden strip packing, or large elastic cushioning, such as corks, fastened securely in position. The use of hay, excelsior, ground cork, or similar materials, whether treated or untreated, is prohibited.

(e) Perchloric acid in any quantity must not be packed with any other article.

(f) *Closures for bottles.* Required as follows:

(1) Glass stoppers ground to fit and held in place by plaster of Paris covered by a strong cloth securely tied; or (2) threaded-type acid-resistant caps with a gasket or lining impervious to the acid and sufficiently resilient, or cushioned, to give an acid-proof closure; at least one complete continuous thread is required to be engaged when bottle is closed for shipment.

(g) Inside containers must be well cushioned. All material for cushioning must be incombustible mineral material, such as whiting, mineral wool, infusorial earth (kieselguhr), asbestos, sifted ashes, or powdered china clay, etc. The use of hay, excelsior, ground cork, or similar material, either treated or un-

treated, is prohibited. Where the cushioning material is very fine or powdery, separate partitions for the individual inside containers should be provided to prevent the bottles from shifting and coming into contact with each other, and the box must be tight to prevent sifting of cushioning material.

(h) *Cushioning of inside containers* in outside wooden boxes by means of elastic packings, such as wooden strips or large corks fastened securely in position, is authorized if the completed package will pass the swing test prescribed for boxed carboys, in spec. 1A.

270 (a) *Phosphorus tribromide, phosphorus trichloride, and phosphorus oxychloride* must be packed in specification containers as follows:

(b) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with glass or earthenware inside containers not over 1 gallon each, except that inside containers up to 3 gallons each are authorized when only one is packed in an outside container.

(c) *Spec. 11A or 11B.* Wooden barrels or kegs with glass or earthenware inside containers not over 2 gallons each; the glass or earthenware containers must be cushioned in the outside containers by means of incombustible elastic packing material of such nature that a mixture of the liquid and the packing material will not cause fires or heating.

(d) *Spec. 28.* Metal-jacketed lead carboys.

(e) *Spec. 5H.* Lead-lined metal barrels or drums.

271 (a) *Phosphorus oxychloride and phosphorus trichloride* may be shipped in specification containers as follows:

(b) As prescribed in sec. 270.

(c) *Spec. 5K.* Nickel drums.

(d) *Spec. 103A.* Tank cars, when these cars are lead lined.

(e) *Phosphorus trichloride* may, in addition to containers as prescribed in secs. 270 and 271, be shipped in metal barrels or drums, spec. 5A.

272 (a) *Sulfuric acid* (oleum, oil of vitriol, etc.) must be packed in specification container as follows:

(b) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with glass or earthenware inside containers not over 1 gallon each, except that inside containers up to 3 gallons each are authorized when only one is packed in each outside container.

(c) *Spec. 31.* Jugs in tubs. Jugs not over 2 gallons each and only one jug in each tub.

(d) *Spec. 11A or 11B.* Wooden barrels or kegs with glass or earthenware inside containers not over 2 gallons each.

(e) *Spec. 1A or 1C.* Carboys in boxes or kegs; authorized only for acid of not over 100.5 percent H₂SO₄.

(f) *Spec. 103A.* Tank cars.

(g) *Spec. 5A.* Metal barrels or drums only for acid of 1.81 specific gravity (65° Baumé) or greater strength or when the strength of the acid is 60–65° Baumé and the acid has been treated with an inhibitor that renders its corrosive effects

on steel no greater than 66° Baumé commercial sulfuric acid.

(h) *Spec. 5H.* Lead-lined metal barrels or drums authorized only for acid of not over 93.2 percent H₂SO₄.

(i) *Spec. 5D.* Rubber-lined metal barrels or drums authorized only for acid of not over 1.4 specific gravity (42° Baumé); any such container that shows evidence of damage must be tested before shipment for defect in lining in the manner prescribed in spec. 5D.

(j) For water-white sulfuric acid, electrolyte grade, of specific gravity 1.7 (60° Baumé) or over in carboys in boxes, barrels or kegs, gaskets must be in a plastic condition when applied.

(k) Soft rubber gaskets are authorized on carboys in boxes, barrels or kegs containing sulfuric acid of not over 1.4 specific gravity.

(l) The use of special glass-lined tank car for test service is also provided for by I. C. C. authority in docket 3666, dated September 4, 1935, amended October 29, 1938.

273 (a) *Sulfur trioxide* must be packed in specification containers as follows:

(b) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with glass or earthenware inside containers not over 1 gallon each.

(c) *Spec. 5A.* Metal barrels or drums, not over 55 gallons capacity each.

COMPRESSED GASES

300 A compressed gas is defined as any material with a gage pressure exceeding 25 pounds per square inch at 70° F.; or any liquid inflammable material having a Reid* vapor pressure exceeding 40 pounds per square inch absolute at 100° F. (See sec. 326 for gases defined and classified as poisonous.)

*American Society for Testing Materials Tentative Method of Test for Vapor Pressure of Petroleum Products (Reid Method) (D-323-38-T).

Packing

302 (a) *Compressed gases*, except poisonous gases as defined by sec. 326 (a), are exempt from specification packaging and labeling requirements for transportation by rail freight, rail express, highway, or by carrier by water as follows:

(b) In cylinders or tubes not exceeding 2-inch outside diameter, and of not more than 4-fluid-ounce capacity.

(c) *Hand fire extinguishers* containing nonliquefied gas for the purpose of expelling fire-extinguishing contents.

(d) (1) *Machines or apparatus* assembled for shipment containing not over 15 pounds weight of gas or liquid for their operation, *refrigerating machines* of the self-contained type containing not over 25 pounds weight of gas, and *refrigerating machines* of the remote-control type, consisting of separate units shipped separately and each containing not over 25 pounds weight of gas, under the following conditions:

(d) (2) All parts subject to gas pressure during shipment must be tested during manufacture by interior pressure and must show no leakage or indication of failure under the test; for liquefied gas

the test pressure must be 4 times and for nonliquefied gas it must be 5/3 times the gas pressure at 70° F.

(d) (3) The liquid portion of the gas, if any, must not completely fill the container at 130° F.

(d) (4) The amount of gas, if liquefied, must not exceed the filling densities prescribed in sec. 303 (k) or 303 (n).

(e) (1) Metal containers filled with nondangerous material to not over 90 percent capacity at 70° F. and then charged with noninflammable, nonliquefied gas; each container must be tested before shipment to three times the gas pressure at 70° F., and, when refilled and reshipped, must be retested at this pressure before each shipment. Authorized as follows:

(e) (2) Containers not over 1 quart capacity charged to not over 170 pounds per square inch at 70° F.

(e) (3) Containers not over 30 gallons capacity charged to not over 75 pounds per square inch at 70° F.

303 (a) *Compressed gases* must be in metal cylinders unless otherwise specifically provided.

(b) Cylinders, drums, tanks, tank motor vehicles, tank cars, and other containers must not contain gases capable of combining chemically.

(c) *Charged cylinders made in foreign countries* must not be offered for transportation in domestic traffic until they have been tested in this country and proper reports rendered as required by the specifications that apply.

(d) (1) *Compressed gas* and other material, (mixtures of), offered for transportation, when not in violation of sec. 303 (b), must be shipped as required for compressed gas, except as follows:

(d) (2) Mixtures containing any poisonous article, class C, in such proportion that the mixture would be classed as a poisonous article under sec. 362 (a), may be shipped in cylinders as authorized for such poisonous article.

(d) (3) Mixtures containing any poisonous article, class A, in such proportion that the mixture would be classed as a poisonous article under sec. 326 (a), must be shipped in cylinders as authorized for such poisonous article.

(e) *Weight limits:* Cylinders purchased after Nov. 1, 1935 and charged with chlorine must not contain over 150 pounds of gas. Cylinders charged with other gases must not contain over 300 pounds of gas.

(f) *Retest:* Cylinders for which prescribed periodic retests have become due must not be charged and shipped until such retests have been properly made.

(g) *Ownership:* Cylinders containing compressed gas must not be shipped unless they were charged by or with the consent of the owner of the cylinders.

(h) The "filling density" is hereby defined as the percent ratio of the weight of gas in a container to the weight of water that the container will hold.

(i) *Weight and pressure check:* The amount of liquefied gas charged into cyl-

inders or drums must be determined by weight and this weight must also be checked, after disconnecting from the charging line, by the use of proper scales. The pressure of nonliquefied gas and gas in solution must be checked daily on a representative cylinder after it has cooled to a settled temperature.

(j) (1) *Filling limits:* The liquid portion, if any, of the gas must not completely fill the cylinder or drum at 130° F.

(j) (2) For mixtures, the liquid portion of the gas plus any additional liquid or solid must not completely fill the container at 130° F.

(j) (3) The pressure in the cylinder at 70° F. must not exceed the service pressure for which the container is designed. (See sec. 303 (p) (1).)

(j) (4) The pressure in the cylinder at 130° F. must not exceed one and one-fourth times the service pressure for which the container is designed, except in the case of acetylene, nitrous oxide, and liquefied carbon dioxide. (See sec. 303 (p) (1).)

(k) The following restrictions must also be compiled with for the gases named:

Kind of gas	Maximum permitted filling density (see sec. 303 (h))	Cylinders* marked as shown in this column must be used except as provided in note 1 and sec. 303 (p) (2) to 303 (p) (6)
Anhydrous ammonia	54	ICC-4; ICC-3A450; ICC-4A450; ICC-3.
Chlorine	125	ICC-3A450; ICC-25; ICC-3.
Dichlorodifluoromethane	119	ICC-3A200; ICC-3B350; ICC-4A200; ICC-4B350; ICC-3; ICC-4; ICC-25; ICC-25-200; ICC-33.
Ethane	35.8	ICC-3A1500; ICC-3.
Ethane	35.8	ICC-3A200.
Ethylene	31.0	ICC-3A1500; ICC-3.
Ethylene	32.5	ICC-3A200.
Hydrogen sulfide	63	ICC-3A450; ICC-3B450; ICC-4A450; ICC-4B450; ICC-25-450; ICC-3A1500; ICC-3.
Liquefied carbon dioxide (see notes 3 and 5)	63	
Methylchloride (see note 4)	75	ICC-3A200; ICC-3B350; ICC-4A200; ICC-4B350; ICC-3; ICC-4; ICC-25; ICC-25-200; ICC-33.
Monomethylamine	54	ICC-3A200; ICC-4A200; ICC-4; ICC-3.
Nitrosyl chloride	110	ICC-3BN400 only.
Nitrous oxide (see notes 2 and 3)	63	ICC-3A1500; ICC-3.
Propylene	44	ICC-3A200; ICC-3B350; ICC-4A200; ICC-4B350; ICC-3; ICC-4; ICC-25; ICC-25-200; ICC-33.
Sulfur dioxide	125	ICC-3A200; ICC-3B350; ICC-4A200; ICC-4B350; ICC-3; ICC-4; ICC-25; ICC-25-150; ICC-33.

*Specs. 3, 25, 26, 33, and 35 are now obsolete but cylinders made thereunder may be continued in service.

Note 1: Cylinders complying with spec. 3E are also authorized for all gases named in this table for which steel cylinders are authorized except where ICC-3A200 cylinders are specified.

Note 2: Filling density for nitrous oxide may be 75 percent in cylinders made previous to Feb. 1, 1917, of less than 12-pound water capacity, and if known to have passed a test pressure of not less than 3,500 pounds per square inch.

Note 3: The maximum amount of liquefied carbon dioxide or nitrous oxide, with 1 pound allowable variation in each cylinder, must not be over 20 pounds for standard cylinders 5 1/2 inches in diameter by 61 inches long, nor over 20 pounds for standard cylinders 6 1/2 inches in diameter by 61 inches long and larger. Provided, That cylin-

ders having interior diameter not over 10 inches, walls not less than 3/4 inch thick, and capacity not less than 4,200 cubic inches, may be shipped by or for the United States Government when charged with not over 102 pounds of gas.

Provided, further, That foregoing provisions of this note do not apply to cylinders of size not over 9 1/2 inches by 51 inches (approximately) when charged with mixtures of carbon dioxide or nitrous oxide containing at least 6 percent by weight of gas or liquid other than carbon dioxide or nitrous oxide.

Provided, further, That cylinders marked ICC-3A2300 or for higher pressures are authorized to be shipped when charged with 75 or 100 pounds of gas with not over 1 pound variation plus or minus: filling density must not exceed 68 percent.

NOTE 4: Cylinders ICC-3A150, ICC-3B150, ICC-4A150, and ICC-4B150 manufactured prior to December 7, 1936, are also authorized.

NOTE 5: Mining devices consisting of a cylinder containing carbon dioxide with a heating element, are authorized for shipment under the following conditions: Cylinders shall be of steel, have a calculated bursting pressure of at least 39,000 pounds per square inch, be fitted with a frangible disc that will operate at not over 57 percent of that pressure, be able to withstand a drop of 10 feet so as to strike crosswise on a steel rail while under internal pressure of at least 3,000 pounds per square inch, and be charged with not over 6 pounds of carbon dioxide gas at a filling density of not over 85 percent. (See sec. 303 (h)); the cylinders are exempted from specification requirements other than the foregoing; the device must be shipped in strong boxes, described as liquefied carbon dioxide gas ("mining device"), and marked, labeled, and certified as prescribed for liquefied carbon dioxide.

(1) (1) *Acetylene gas* must be shipped in cylinders, spec. 8. The cylinders must be completely filled with a porous material that has been tested with satisfactory results by the Bureau of Explosives, and this material must be charged with a suitable solvent.

(1) (2) The specific gravity of the solvent in acetylene cylinders must be 0.796 or over at 15.5° C., 59.9° F. The amount of solvent must not cause the tare weight of the cylinder to exceed its marked tare weight. The tare weight includes the weight of the cylinder proper, porous filling, valve, and solvent, but without removable cap.

(1) (3) When the porosity of the filling material is 75 percent to 80 percent, the amount of solvent at 70° F. must not exceed 40 percent by volume of the water capacity of the cylinder shell.

(1) (4) When the porosity of the filling material is 70 percent up to but not including 75 percent, the amount of solvent at 70° F. must not exceed 37 1/2 percent by volume of the water capacity of the cylinder shell.

(1) (5) When the porosity of the filling material is 65 percent up to but not including 70 percent, the amount of solvent at 70° F. must not exceed 35 percent by volume of the water capacity of the cylinder shell.

(1) (6) The pressure in cylinders containing *acetylene gas* must not exceed 250 pounds per square inch at 70° F., and in case the cylinders are marked for a lower allowable charging pressure at 70° F. then that pressure must not be exceeded.

(1) (7) Cylinders containing *acetylene gas* must not be shipped unless they were charged by or with the consent of the owner, and by a person, firm, or company having possession of complete information as to the nature of the porous filling, the kind and quantity of solvent in the cylinders, and the meaning of such markings on the cylinders as are prescribed by the Commission's regulations and specifications applying to containers for the transportation of acetylene gas.

(m) (1) *Liquefied gases, except gas in solution or poisonous gas*, for which charging requirements are not definitely prescribed in sec. 303 (k) or 303 (n), must be shipped, subject to sec. 303 (a) to 303 (j), in cylinders made under specification containers as follows:

(m) (2) Spec. 3, 3A, 3B, 3E, 4, 4A, 4B, 25, 26, or 38. See sec. 303 (p).

(n) (1) *Liquefied petroleum gas* must be charged into specification containers as follows:

(n) (2) Spec. 3, 3A, 3B, 3E, 4, 4A, 4B, 25, 26, or 38.—Cylinders authorized under sec. 303 (p) (2) to 303 (p) (6) may be used.

(n) (3) Spec. 3C or 4C cylinders are authorized when capacity of cylinders does not exceed 3,881 cu. in. (16 gallons with 5 percent tolerance), for liquefied petroleum gas with gas pressure not over 145 pounds per square inch, gage, at 130° F.

(n) (4) *Spec. 7.* Cylinders when made prior to October 1, 1930, are authorized when capacity of cylinder does not exceed 3,881 cu. in. (16 gallons with 5 percent tolerance), for liquefied petroleum gas with gas pressure not over 70 pounds per square inch at 70° F., nor over 145 pounds per square inch at 130° F.

(n) (5) *Spec. 7.* Cylinders made prior to October 1, 1930, and lawfully marked ICC-7-150, are authorized for the shipment of liquefied petroleum gas, subject to sec. 303 (j), provided they have been satisfactorily retested, by water jacketed test, as prescribed in sec. 303 (p) (13) (a) to 303 (p) (14) (a).

(n) (6) *Spec. 5.* Metal drums made prior to October 1, 1930, of 11 gallons capacity and made of steel at least 16 gage U. S. standard, are authorized for gas pressure not over 23 pounds per square inch at 70° F., nor over 70 pounds per square inch at 130° F.

(n) (7) *Spec. 5F.* Metal drums. Authorized for gas pressure not over 28 pounds per square inch at 70° F., nor over 86 pounds per square inch at 130° F.

(n) (8) *Filling density limited as follows:*

Minimum specific gravity of the liquid material at 60° F.	Maximum filling density in percent of the water-weight capacity of the container	Minimum specific gravity of the liquid material at 60° F.	Maximum filling density in percent of the water-weight capacity of the container
0.271-0.289	26	0.504-0.510	42
0.290-0.306	27	0.511-0.519	43
0.307-0.322	28	0.520-0.527	44
0.323-0.338	29	0.528-0.536	45
0.339-0.354	30	0.537-0.544	46
0.355-0.371	31	0.545-0.552	47
0.372-0.398	32	0.553-0.560	48
0.399-0.425	33	0.561-0.568	49
0.426-0.440	34	0.569-0.576	50
0.441-0.452	35	0.577-0.584	51
0.453-0.462	36	0.585-0.592	52
0.463-0.472	37	0.593-0.600	53
0.473-0.480	38	0.601-0.608	54
0.481-0.488	39	0.609-0.617	55
0.489-0.495	40	0.618-0.626	56
0.496-0.503	41	0.627-0.634	57

(n) (9) Subject to sec. 303 (j) (4), any filling density percentage prescribed in sec. 303 (n) is authorized to be increased by 2 for liquefied petroleum gas in spec. 26 or 3 cylinders or in spec. 3A marked for 1,800 pounds, or higher, service pressure.

(o) (1) *Nonliquefied gases, except gas in solution or poisonous gas*, for which charging requirements are not definitely prescribed in sec. 303 (k), must be shipped, subject to sec. 303 (a) to 303 (j), in any type of cylinder made under specifications as follows:

(o) (2) Spec. 3, 3A, 3B, 3C, 3D, 3E, 4, 4A, 4B, 4C, 7, 25, 26, 33, or 38. See sec. 303 (p).

(p) *Qualification and Maintenance of Cylinders*

(p) (1) (a) *The "service pressure"* for which a cylinder is designed is hereby defined as that which is marked on the container. For example, for containers marked ICC-3A1800 the service pressure is 1,800 pounds.

(p) (1) (b) For cylinders not marked in accordance with the foregoing, the service pressure is hereby defined as follows:

(p) (1) (c) For ICC-3 and 3E cylinders the service pressure is 1,800 pounds.

(p) (1) (d) For ICC-4 cylinders the service pressure is 300 pounds.

(p) (1) (e) For ICC-8 cylinders the service pressure is 250 pounds.

(p) (1) (f) For ICC-25 cylinders the service pressure is 300 pounds.

(p) (1) (g) For ICC-33 cylinders the service pressure is 480 pounds.

(p) (1) (h) For ICC-38 cylinders the service pressure is 250 pounds.

(p) (1) (i) For cylinders made prior to the effective date of specifications, the service pressure is hereby defined as being the same as for the same type of cylinder made in accordance with the current specifications.

(p) (2) *Cylinders in domestic use previous to the date upon which specifications therefor were first made effective* may be used if the cylinders have been properly tested and otherwise comply with the requirements of sec. 303 (p) (2) to 303 (p) (14) of these regulations.

(p) (3) (a) Cylinders of foreign manufacture, received from foreign countries for charging with compressed gas, may be charged and shipped for export only:

(p) (3) (b) Provided they are retested before recharging at a test pressure corresponding to that prescribed in these regulations for the proposed service pressure. This retest may be omitted only if the cylinder can be definitely identified as having been retested under this provision within 5 years;

(p) (3) (c) *Provided further*, That the maximum filling density and service pressure for each cylinder shall be in accordance with all packing requirements of these regulations for the compressed gas involved and the test pressure established by the retest of the cylinder.

(p) (3) (d) Records giving data showing the results of the tests made on all cylinders must be preserved for inspection for at least 5 years.

(p) (3) (e) Bill of lading or other shipping paper shall, when possible, identify the cylinder and shall carry the following certification: "These cylinders have been retested and refilled in accordance with the I. C. C. requirements for export."

(p) (4) *Cylinders previously used in any service* in accordance with these regulations may be transferred to a service requiring less strength and for which they are suitable, upon application to the Bureau of Explosives and receipt of advice to change the marking on the cylinders.

(p) (5) Cylinders made prior to October 1, 1930, for which steel manufacturer's certificates are not available but for which physical and chemical tests on samples taken from one out of each 200 cylinders are in proper form, each cylinder having been satisfactorily tested in water-jacket apparatus to 2 times the service pressure (see sec. 303 (p) (1)), properly reported as otherwise in full compliance with spec. 7 effective at date of manufacture, and lawfully marked ICC-7-150, are authorized for use under the provisions of these regulations.

(p) (6) When containers with a marked pressure limit are prescribed, other containers made under the same specification, but with a higher marked pressure limit are authorized. For example, containers marked ICC-4B500 may be used where ICC-4B300 is specified.

(p) (7) (a) *Safety devices.* Each cylinder, unless excepted in this section, containing compressed gas must be equipped with one or more safety devices approved, as to type and location, by the Bureau of Explosives and found to prevent explosion of the normally charged cylinder when it is placed in a fire.

Exceptions as follows:

(p) (7) (b) Cylinders not over 12 inches long, exclusive of neck, nor over 4½ inches outside diameter.

(p) (7) (c) Cylinders containing nonliquefied gas under pressure of 300 pounds per square inch or less at 70° F.

(p) (7) (d) Cylinders containing poisonous gas or liquid as defined in sec. 326 (a).

(p) (7) (e) Cylinders containing less than 165 pounds of anhydrous ammonia, or mono, di, or tri-methylamine.

(p) (7) (f) Drums containing liquefied petroleum gas as provided for in sec. 303 (n) (6) and (7).

(p) (8) *Valve protection.* Cylinders containing inflammable, corrosive, or noxious gases (hydrogen, pintsch gas, coal gas, chlorine, sulfur dioxide, etc.), must have their valves protected by metal caps securely attached to the cylinders and of sufficient strength to pro-

tect the valves from injury during transit: *Provided*, That these caps will not be required (1) if the cylinders are boxed or crated so as to give a proper protection to the valves; (2) if the valves are so recessed into the cylinders or otherwise protected so that they will not be subjected to a blow if the cylinder is dropped on a flat surface; (3) if, for cylinders containing nonliquefied gas under pressure not exceeding 300 pounds per square inch at 70° F., the valves are strong enough to avoid injury during transit; (4) if the cylinders are loaded in cars or motor vehicles by the consignee and to be unloaded by the consignee, are loaded compactly in an upright position, and are securely braced.

(p) (9) (a) *Marking on cylinders must not be changed* except as follows:

(p) (9) (b) By application of additional marks not affecting the test pressure or filling pressure; these must not obliterate previously applied marks.

(p) (9) (c) By application of test pressure or filling pressure marks, or alteration of such marks, to indicate a reduced test and filling pressure; authorized only for cylinders that have not failed in the quinquennial test.

(p) (9) (d) By change of serial numbers or ownership marks or both; report in sufficient detail so that previous serial number and ownership marks can be determined for each cylinder, arranged by lot numbers or by consecutive serial numbers, must be filed with the Bureau of Explosives.

(p) (9) (e) By change in marks which indicate compliance with specifications and charging and testing pressures (such as ICC-3, ICC-3A-1800) to indicate a higher test and filling pressure; authorized only upon written instructions from the Bureau of Explosives.

(p) (9) (f) When restrictions imposed by sec. 303 (j) will result in condemnation of cylinders previously in authorized use, the Bureau of Explosives shall, upon application, approve change in marks for pressures not greater than as follows: ICC-7-70 for change to ICC-7-116; ICC-26-150 for change to ICC-26-300; ICC-26-300 for change to ICC-26-450; ICC-26-600 for change to ICC-26-900; ICC-26-1000 for change to ICC-26-1200.

(p) (10) *Marking on cylinders must be kept plain.* All prescribed markings on cylinders must be maintained in a readable condition, or a copy of said markings reproduced by stamping on brass plates permanently secured to the cylinders is permitted.

(p) (11) *Cylinders exposed to action of fire.* Cylinders which have been in a fire must not again be placed in service until they have been properly heat-treated and retested as prescribed in sec. 303 (p) (12): *Provided*, That cylinders made of plain carbon steel with not over 0.25 percent carbon need not be heat-treated, and may be used after passing

the pressure test prescribed. Acetylene cylinders need not be heat-treated or tested provided porous filling is found to be unchanged and intact.

(p) (12) *Reheat treatment and retest of cylinders.* The reheat treatment of cylinders must be followed by retest and these operations must be carried out, supervised, and reported, as prescribed for the original heat treatment and test by the specification covering the manufacture of the type of cylinder in question. The retest pressure shall be as prescribed for the quinquennial retesting of cylinders: *Provided*, That increased retest pressure is authorized under testing procedure approved in writing by the Bureau of Explosives. In the case of cylinders of outside diameter exceeding 4 inches, a permanent expansion of not less than 3 percent or more than 10 percent of the total expansion must be shown in the retest: *Provided*, That if the cylinders can be segregated into lots having practically the same chemical composition, the allowable permanent expansion in the retest may be from zero to 10 percent of the total expansion, if one cylinder out of each such lot of 100 cylinders or less is subjected to and passes the requirements of the flattening and physical tests as specified by the specification for the manufacture of the type of cylinder in question.

(p) (13) (a) *Quinquennial retest of cylinders.* Each cylinder, except as specifically exempted in sec. 303 (p) (14), must be subjected, at least once in five years, to a test by interior hydrostatic pressure in a water-jacket, or other apparatus of suitable form, as approved by the Bureau of Explosives:

(p) (13) (b) *Provided*, That, without regard to date of previous test, cylinders of ICC-4 type that show bad dents or other evidence of rough usage, or that are corroded locally to such extent as to indicate possible weakness, or that have lost as much as 5 percent of their official tare weight, must be retested before being again charged and shipped. After any retest, the actual tare weight for those cylinders passing the test may be recorded as their new official tare weight.

(p) (13) (c) In this test the pressure must be applied for at least 30 seconds and as much longer as may be necessary to secure complete expansion of the cylinder. The gage indicating the total expansion of the cylinder must be such that the total expansion can be read with an accuracy of 1 percent, except that a reading to 0.1 cubic centimeter shall be acceptable. The gage indicating the pressure must be capable of being read to within 1 percent of the test pressure.

(p) (13) (d) A cylinder must be condemned when it leaks or when the permanent expansion exceeds 10 percent of the total expansion. Cylinders condemned on account of excessive perma-

nent expansion may be further handled under sec. 303 (p) (12).

(p) (13) (e) Records giving data showing the results of the tests made on all cylinders must be kept, and each cylinder passing the test must be marked with the date (month and year) plainly and permanently stamped into the metal of the cylinder. For example, 4-21 for April 1921. Dates of previous tests must not be obliterated.

(p) (14) (a) The tests prescribed by sec. 303 (p) (13) must be as follows:

Specification under which cylinders were made	Retest pressure (pounds per square inch)
ICC-3.	3,000 pounds.
ICC-3A; ICC-3D; ICC-4A; ICC-26 marked for filling at over 450 pounds.	5/3 times the service pressure. (See sec. 303 (p) (1).)
ICC-3B; ICC-3BN; ICC-4B; ICC-26 marked for filling at 450 pounds and below.	2 times the service pressure. (See sec. 303 (p) (1).)
ICC-3C; ICC-3E; ICC-4C; ICC-8.	Quinquennial test not required.
ICC-7 when used as authorized in sec. 303 (n) (5).	300 pounds.
ICC-7 when not used under authority of sec. 303 (n) (5).	Quinquennial test not required.
ICC-4.	700 pounds.
ICC-25; ICC-33.	500 pounds.
ICC-33.	800 pounds.

(p) (14) (b) *Exceptions* as follows:

(p) (14) (c) All cylinders of outside diameter less than 2 inches and length less than 2 feet are exempted from retest.

(p) (14) (d) All cylinders marked with a test pressure must be retested at that pressure.

(p) (14) (e) High-pressure cylinders (designed for pressures in excess of 300 pounds at 70° F.) made before March 31, 1912, and not marked with a test pressure or with an allowable filling pressure, must be retested at 3,000 pounds per square inch.

(p) (14) (f) Low-pressure cylinders of the I. C. C. 7 type (designed for non-liquefied gas at not over 300 pounds at 70° F.) made before March 31, 1912, must be tested once at two times the filling pressure for which they were designed. Further tests not required.

(p) (14) (g) Acetylene cylinders of the I. C. C. 8 type made before March 31, 1912, must be tested once at 500 pounds. Further tests not required.

(p) (14) (h) Anhydrous ammonia cylinders of the I. C. C. 4 type made before March 31, 1912, and having heads of small or flat curvature that will not stand a test of 900 pounds without showing more than 10 percent permanent expansion, and wrought iron cylinders of the same type made before 1895 that have been annealed so as to put them in proper condition, must be retested at 500 pounds per square inch.

(p) (14) (i) Cylinders made in compliance with specification I. C. C. 4, and other cylinders of that type made before March 31, 1912, may be retested decennially instead of quinquennially if the test is made at a pressure of not less than 700 pounds per square inch.

(p) (14) (j) Chlorine and sulfur dioxide cylinders made before April 20, 1915, must be retested at 500 pounds per square inch.

(p) (14) (k) Cylinders of not over 10 pounds water capacity and authorized for a service pressure (see sec. 303 (p) (1)) of not over 300 pounds per square inch may be tested by application of required test pressure without the use of special apparatus and without determination of total or permanent expansion.

(q) *Compressed Gases in Tank Cars*

(q) (1) Compressed gases must not be shipped in tank cars except as provided in sec. 303 (q) (2) to (q) (7) and sec. 423 and in the following table:

Name of gas	Maximum permitted filling density, Note 1	Required type of tank car, Note 2
	<i>Percent</i>	
Anhydrous ammonia	50	ICC-106A500.
	57	ICC-105A300.
	125	ICC-106A500.
Chlorine	125	Note 8. ICC-105A300.
Crude nitrogen fertilizer solution.	Note 6	ICC-106A500.
	Note 6	ICC-105A300. [12.
Dichlorodifluoromethane.	119	ICC-106A500, Note
	125	ICC-105A300.
Dimethyl ether	59	ICC-106A500.
Fertilizer ammoniating solution containing free ammonia.	62	ICC-105A300.
	Note 6	ICC-106A500.
	Note 6	ICC-105A300.
Helium	Note 5	ICC-107A.
Hydrogen	Note 5	Note 7. ICC-107A.
		USNX Nos. 1002 to 1012, incl.
Hydrogen sulfide	68	ICC-106A800.
	63	ICC-105A600.
Liquefied carbon dioxide.	Note 10	Note 11. ICC-105A500, ICC-105A600.
Liquefied hydrocarbon gas.	Note 6	Notes 5 and 9.
Liquefied petroleum gas (pressure not exceeding 375 pounds per square inch at 130° Fahr.).	Note 4	ICC-106A500.
Liquefied petroleum gas (pressure not exceeding 450 pounds per square inch at 105° Fahr.).	Note 3	Notes 5 and 9.
Liquefied petroleum gas (pressure not exceeding 375 pounds per square inch at 105° Fahr.).	Note 3	Notes 5 and 9.
Liquefied petroleum gas (pressure not exceeding 375 pounds per square inch at 105° Fahr.).	Note 3	Notes 5 and 9.
Liquefied petroleum gas (pressure not exceeding 300 pounds per square inch at 105° Fahr.).	Note 3	Notes 5 and 9.
Liquefied petroleum gas (pressure not exceeding 75 pounds per square inch at 105° Fahr.).	Note 3	Note 9. ICC-104A, Note 13.
Methylchloride	75	ICC-106A500.
	75	ICC-105A300.
Nitrogen	Note 5	ICC-107A.
Oxygen	Note 5	ICC-107A.
	125	ICC-106A500, Note
Sulfur dioxide	125	12.
		ICC-105A300.

NOTE 1: The filling density for liquefied gases is hereby defined as the percent ratio of the weight of gas in the tank to the weight of water that the tank will hold. For determining the water capacity of the tank in pounds, the weight of a gallon (231 cubic inches) of water at 60° F. in air shall be 8.32823 pounds.

NOTE 2: When tank cars marked ICC-105A300 are prescribed, tank cars marked ICC-105A400, 105A500, and 105A600 may also be used; when ICC-104A tank cars are prescribed, tank cars marked ICC-105A300, 105A400, 105A500, and 105A600 may also be used; and when ICC-106A500 tank cars are prescribed, tank cars marked ICC-106A800 may also be used.

NOTE 3: Maximum permitted filling density in tank cars transporting liquefied petroleum gas of specific gravity shown, taken at 60 degrees Fahrenheit.

Specific gravity	Filling density	Specific gravity	Filling density	Specific gravity	Filling density
0.500	45.500	0.542	50.625	0.634	55.300
0.501	45.500	0.543	50.750	0.635	55.400
0.502	45.700	0.544	50.875	0.639	55.600
0.503	45.800	0.545	51.000	0.637	55.625
0.504	46.000	0.546	51.100	0.638	55.750
0.505	46.000	0.547	51.200	0.639	55.875
0.506	46.125	0.548	51.300	0.640	56.000
0.507	46.250	0.549	51.400	0.641	56.125
0.508	46.375	0.550	51.500	0.642	56.250
0.509	46.500	0.551	51.625	0.643	56.375
0.510	46.750	0.552	51.750	0.644	56.500
0.511	47.000	0.553	51.875	0.645	56.625
0.512	47.125	0.554	52.000	0.646	56.750
0.513	47.250	0.555	52.125	0.647	56.875
0.514	47.375	0.556	52.250	0.648	56.999
0.515	47.500	0.557	52.375	0.649	57.000
0.516	47.625	0.558	52.500	0.650	57.100
0.517	47.750	0.559	52.625	0.651	57.200
0.518	47.875	0.560	52.750	0.652	57.300
0.519	48.000	0.561	52.875	0.653	57.400
0.520	48.125	0.562	53.000	0.654	57.500
0.521	48.250	0.563	53.100	0.655	57.600
0.522	48.375	0.564	53.200	0.656	57.700
0.523	48.500	0.565	53.300	0.657	57.800
0.524	48.600	0.566	53.400	0.658	57.900
0.525	48.700	0.567	53.500	0.659	58.000
0.526	48.800	0.568	53.600	0.610	58.100
0.527	48.900	0.569	53.700	0.611	58.200
0.528	49.000	0.570	53.800	0.612	58.300
0.529	49.125	0.571	53.900	0.613	58.400
0.530	49.250	0.572	54.000	0.614	58.500
0.531	49.375	0.573	54.125	0.615	58.600
0.532	49.500	0.574	54.250	0.616	58.700
0.533	49.625	0.575	54.375	0.617	58.800
0.534	49.750	0.576	54.500	0.618	58.900
0.535	49.875	0.577	54.600	0.619	59.000
0.536	50.000	0.578	54.700	0.620	59.100
0.537	50.100	0.579	54.800	0.621	59.200
0.538	50.200	0.580	54.900	0.622	59.300
0.539	50.300	0.581	55.000	0.623	59.400
0.540	50.400	0.582	55.100		
0.541	50.500	0.583	55.200		

NOTE 4: See sec. 303 (n) (8).

NOTE 5: See sec. 303 (n) (2).

NOTE 6: See sec. 303 (n) (3).

NOTE 7: For shipments made by or for the United States Government provided the tanks of such cars are equipped with the present frangible disc safety device with some platinated asbestos or other ignition element which will instantly ignite the hydrogen should the frangible disc rupture.

NOTE 8: For tank cars of other than ICC 106A type, used for shipping chlorine, tests prescribed in paragraph 15 of spec. 105A300 must be made at intervals of 2 years or less and interior pipes of liquid discharge valves must be equipped with check valves of approved design.

NOTE 9: For tank cars of other than ICC 106A type used for shipping liquefied hydrocarbon or liquefied petroleum gas, interior pipes of liquid and gas discharge valves must be equipped with check valves of approved design.

NOTE 10: The liquid portion of the gas at 60° F. must not completely fill the tank.

NOTE 11: Before an ICC-105A600 or 105A600 tank car may be used for the transportation of liquefied carbon dioxide, the following requirements must be met: Tank must be lagged with an approved insulation material of a thickness so that the thermal conductance is not more than 0.03 B. t. u. per square foot, per degree F. differential in temperature per hour. Tank must be equipped with one safety valve of approved design set to open at a pressure not exceeding three-fourths of the test pressure of the tank and one frangible disc device of approved design set to function at a pressure less than the test pressure of the tank. The discharge capacity of each of these safety devices must be sufficient to prevent building up of pressure in tank in excess of three-fourths of the test pressure of the tank. Tank must be equipped with two pressure-regulating valves of approved design, one set to open at three-fifths of the test pressure of the tank and one set to open at two-thirds of the test pressure of the tank. Each regulating valve and safety device must have its final discharge piped to the outside of the dome.

NOTE 12: Tanks complying with specification 100A500 containing sulphur dioxide or dichlorodifluoromethane may be transported on trucks when securely checked or clamped thereon to prevent shifting, and provided adequate facilities are present for handling tanks where transfer in transit is necessary.

NOTE 13: The offer of special fusion-welded steel tanks for test service for transportation of commercial butane by cargo vessel is also provided for by I. C. C. authority No. 3666 dated December 28, 1939, as amended.

(q) (2) The gas pressure at 105° F. in any lagged tank of tank cars of specs. 104A, 105A300, 105A400, 105A500, and

105A600, and at 130° F. in any unlagged tank of tank cars of specs. 106A500 and 106A800, must not exceed three-fourths times the prescribed retest pressure of the tank. The gas pressure at 130° F. in any unlagged tank of tank cars of the 107A series must not exceed seven-tenths of the marked test pressure of the tank.

(q) (3) The liquid portion of the gas at 105° F. must not completely fill a lagged tank nor at 130° F. completely fill an unlagged tank.

(q) (4) The amount of liquefied gas charged into each tank may be determined either, first, by weight, and this weight must be checked after disconnecting the charging line, by the use of proper scales, or, second, the weight of liquefied petroleum gas may be calculated using the outage tables supplied by the tank car owners and the specific gravities as determined at the plant, and this computation must be checked by determination of specific gravity of product after loading. Carriers may verify calculated weights by use of proper scales.

(q) (5) Tank cars containing compressed gases must not be shipped unless they were loaded by or with the consent of the owner thereof; and must not be loaded with any gas which combines chemically with the gas previously loaded therein, until all residue has been removed and interior of tank thoroughly cleaned. For cars of the ICC106A type, the tanks must be placed in position and attached to the car structure by the shipper.

(q) (6) Tank cars made in foreign countries must not be used in domestic traffic until they have been tested in this country and proper reports rendered as required by the specifications that apply.

(q) (7) The maximum quantity of any liquefied gas, except crude nitrogen fertilizer solution and fertilizer ammoniating solution containing free ammonia, loaded into tanks mounted on one car structure, must not exceed 60,000 pounds.

POISONOUS ARTICLES

325 (a) Poisonous articles for the purpose of these regulations are divided into three classes according to degree of hazard in transportation.

(b) Extremely Dangerous Poison—Class A.

(c) Less Dangerous Poison—Class B.

(d) Tear Gases or Irritating Substances—Class C.

326 EXTREMELY DANGEROUS POISONS— CLASS A—POISON GAS LABEL

(a) *Poisonous gases or liquids* of such nature that a very small amount of the gas, or vapor of the liquid, mixed with air is dangerous to life. This class includes the following:

Acrolein.
Chlorpicrin.
Cyanogen.
Diphosgene.
Ethylchlorarsine.
Hydrocyanic acid.
Lewistite.

Methylchlorarsine.

Mustard gas.

Nitrogen peroxide (tetroxide).

Phenylcarbylamine chloride.

Phosgene (diphosgene).

NOTE: Dilute solutions of hydrocyanic acid of not exceeding 5 percent strength are classed as poisonous articles, class B (see sec. 336 and sec. 350).

(b) Poisonous gases or liquids, class A, as defined in sec. 326, except as provided in sec. 329 (c) and sec. 331, must not be offered for transportation by rail express.

Packing

327 (a) Cylinders used must comply with the provisions of sec. 303 (p).

(b) *Closing and cushioning.* All containers must be tightly and securely closed. Inside containers must be cushioned as prescribed, or in any case when necessary to prevent breakage or leakage.

328 (a) *Chlorpicrin, bromacetone, monochloroacetone, and acrolein* when offered for transportation by carriers by rail freight, highway, or water must be packed in specification containers as follows:

(b) As prescribed in sec. 334.

(c) *Spec. 15A, 15B, 15C, or 16A.* Wooden boxes with inside glass bottles or tubes in hermetically sealed metal cans in corrugated fiberboard cartons, spec. 2C. Bottles must contain not over 1 pound of liquid each, must be filled to not over 95 percent capacity, must be tightly and securely closed, and must be cushioned in cans with at least ½ inch of absorbent material. Cans must be made of metal at least 32 gage U. S. standard. Total amount of liquid in outside box must not exceed 24 pounds.

329 (a) *Chlorpicrin or mixtures of chlorpicrin with nonpoisonous liquid or gases, and monochloroacetone*, in addition to containers prescribed in sec. 328, when offered for transportation by carriers by rail freight, highway, or water may be shipped as follows:

(b) (1) *Spec. 3, 3A, 3B, 3C, 3E, 4A, 4B, 4C, 7, 25, or 26* not over 250 pounds water capacity (nominal). Valves or other closing devices must be protected, to prevent injury in transit, by screw-on metal caps or by packing the cylinders in strong boxes or crates. Cylinders less than 18 inches in length or less than 5 inches in diameter must be packed in boxes or crates (see sec. 25).

(b) (2) *Spec. 5A.* Metal drums of not exceeding 33 gallons capacity with welded seams.

(c) (1) *Chlorpicrin* when offered for transportation by rail express must be packed in specification containers as follows (also authorized for transportation by carriers by rail freight, highway, or water):

(c) (2) *Spec. 15A, 15B, 15C, or 16A.* Wooden boxes with inside glass bottles or tubes, in hermetically sealed metal cans in corrugated fiberboard cartons, spec. 2C. Bottles must contain not over 1 pound of liquid each, must be filled to

not over 95 percent capacity, must be tightly and securely closed and must be cushioned in cans with at least ½ inch of absorbent material. Cans must be made of metal at least 32 gage U. S. standard. Total amount of liquid in outside box must not exceed 24 pounds.

(c) (3) *Spec. 15A.* Wooden boxes, metal-strapped, with chlorpicrin absorbed in an efficient absorbing material packed in hermetically sealed metal cans not exceeding 1 quart capacity each.

330 (a) *Chemical ammunition—Projectiles, shells, bombs, and grenades containing poisonous gases or liquids, class A, sec. 326*, but not equipped or packed with ignition elements, bursting charges, detonating fuzes, or explosive components, may only be shipped by, for, or to the War or Navy Department of the United States Government. Shipments must be packed and marked as required by their regulations, and packages must be labeled with the "Poison Gas" label and marked "NONEXPLOSIVE" and with the name of the contents. (See sec. 55 and sec. 57 for explosive poisonous ammunition.)

(b) *Chemical ammunition* containing poisonous liquids or gases, class A, must not be offered for transportation by rail express.

331 (a) (1) *Gas identification sets containing poisonous liquids and gases, class A, and poisonous articles, class C, and chlorine* when offered for transportation by carriers by rail freight, rail express, highway, or water must be packed in specification containers as follows:

(a) (2) *Spec. 15A or 15B.* Wooden boxes under the following conditions:

(a) (3) Gas identification sets containing poisonous liquids and gases, class A, and poisonous articles, class C, may be shipped in amounts not exceeding 5 mls, if a liquid, or 5 grams, if a solid, when mixed with or absorbed in activated charcoal or silica gel, or other absorbent medium, and packed in strong glass bottles of not less than 4-fluid-ounces capacity. The poisonous gases, class A, and chlorine may be shipped if the gas itself is absorbed in activated charcoal or silica gel, or other absorbent medium, this material to be filled into 4-ounce bottles as above; each bottle as herein specified must be surrounded with appropriate absorbent cushioning material, and inclosed in a hermetically sealed metal can; each can must be surrounded on all sides by at least 1 inch of dry, fine sawdust or wood pulp; the cans must be packed in an outside wooden box, spec. 15A or 15B; the bottles must be closed with ground-in glass stoppers securely fastened; the cushioning material around the bottle must be at least 1 inch thick; the cans must be made from metal of thickness not less than 30 gage, United States standard; and there must be not more than a total of 100 grams or mls, or a combination of both, in each outside wooden box.

(b) (1) *Or gas identification sets containing poisonous liquids or gases, class*

A and class C, when offered for transportation by carriers by rail freight, rail express, highway, or water must be packed for shipment as follows:

(b) (2) *The liquids or liquefied gases in hermetically sealed glass tubes* containing not to exceed 40 cubic centimeters each; each tube securely cushioned and packed in an individual mailing tube with screw-thread metal cover; not more than 12 of such mailing tubes, cushioned with corrugated fiberboard, packed in a closed fiberboard container; and not to exceed 4 such fiberboard containers, containing an aggregate of not to exceed 48 glass tubes, cushioned and packed in an outside steel cylinder of not less than 0.145-inch wall thickness, which is closed by a plate, bolted to a flange, welded to cylinder wall. Suitable gasket shall be placed between flange and head plate, and closure shall be such as to prevent leakage of any gas.

332 (a) (1) *Hydrocyanic acid, liquid* (prussic acid), must be packed in specification containers as follows:

(a) (2) As prescribed in sec. 334.

(a) (3) Cylinders must be charged with not more than 0.6 pound of liquid for 1-pound water capacity of cylinder. Each filled cylinder must be tested for leakage before shipment and must show absolutely no leakage; this test must consist in passing over the closure of the cylinder, without the protection cap attached, a piece of Guignard's sodium picrate paper, or other suitably treated paper, to detect any escape of hydrocyanic acid from the cylinder.

(b) (1) *Liquid hydrocyanic acid* completely absorbed in inert material may also be shipped in specification containers as follows:

(b) (2) *Spec. 15A*. Wooden boxes with inside containers consisting of metal cans, spec. 2N, not over 14 pounds water capacity each. The liquid contents of each can must not exceed 0.33 pound of liquid for 1-pound water capacity of the can. Each can containing 4 ounces or more of liquid must be fitted with fiber caps not less than 0.08 inch thick flanged about 1 inch and fitting snugly over each end of the can. Each can must be tested for leakage after being filled and again after being maintained at ordinary room temperature for a period of at least three weeks.

(b) (3) Each can must have its outer surface protected against rust by the use of enamel or lacquer, or each can must be completely wrapped in waterproof paper. The box lining must consist of not more than two pieces of waterproof paper, one piece completely surrounding the contents and running lengthwise of the box, and the other piece completely surrounding the contents and running crosswise of the box. In each instance, the wrapping must overlap at least 4 inches.

333 (a) *Phosgene or diphosgene* must be packed as follows:

(b) As prescribed in sec. 334; filling density (see sec. 303 (h)) must not ex-

ceed 125 percent and a cylinder must not contain more than 150 pounds of phosgene.

(c) Each filled cylinder must be tested for leakage before shipment and must show absolutely no leakage; this test must consist in immersing the cylinder and valve, without the protection cap attached, in a bath of water at a temperature of approximately 150° F. for at least thirty minutes, during which time frequent examinations must be made to note any escape of gas. The valve of the cylinder must not be loosened after this test and before shipment.

334 (a) *Poisonous gases and liquids, as defined in sec. 326, other than those for which special requirements are prescribed*, must be packed in specification containers as follows:

(b) *Spec. 33 or 3D*. Metal cylinders of not over 125 pounds water capacity (nominal). Gaskets if used between the protection cap and neck of cylinder must be renewed for each shipment even though they may appear to be in good condition. Cylinders not fitted with valve protection extension ring must be packed in wooden boxes complying as to construction, marking, and labeling, with the requirements of sec. 25.

335 (a) *Police grenades* containing poisonous gases or liquids, class A, must be packed in specification containers as follows:

(b) *Spec. 15A, 15B, or 15C*. Metal-straped wooden boxes.

(c) Each grenade must be individually inclosed in a corrugated fiberboard carton, spec. 2C, and when so packed must be able to withstand without leakage a drop of 5 feet on concrete. Grenades must consist of copper shell containing securely closed glass bottles or tubes containing not over 50 cubic centimeters of poisonous material. Each outside container may contain not over 24 grenades and weigh not over 75 pounds gross.

(d) Pending approval by the Commission of regulations classifying the numerous devices within the general descriptions of this paragraph, and providing appropriate restrictions to be observed in the transportation thereof, no shipment of packages containing articles under this paragraph shall be made until samples thereof have been examined by the Bureau of Explosives or by other competent testing laboratory in the presence of representative of the Bureau of Explosives, and the shipment is shown to possess such resistance to shocks of transportation and protection against leakage of contents as are afforded by standard types of packages described in regulations published herein, and the packages are labeled or marked to show compliance with this section.

336 LESS DANGEROUS POISONS—CLASS B—LIQUID—POISON LABEL

(a) *Poisonous liquids (including pastes and semisolids)* are substances of such nature that they are chiefly dangerous by external contact with the body or by their

being taken internally as in contaminated food or feeds.

(b) The vapors of some of this class of materials are also offensive or dangerous, but to a much less extent than class A poisons.

Packing

337 *Closing and cushioning*. All containers must be tightly and securely closed. Inside containers must be cushioned as prescribed, or in any case when necessary to prevent breakage or leakage.

338 (a) *Poisonous liquids, class B, as defined in sec. 336, except hydrocyanic acid solutions, methyl bromide, motor fuel antiknock compound, phenyldichlorarsine and tetraethyl lead*, in tightly closed inside containers, securely cushioned when necessary to prevent breakage and packed as follows are exempt from specification packaging and labeling requirements:

(b) In glass or earthenware containers not over 1 quart capacity each, or in metal containers not over 1 gallon capacity each, packed in strong outside wooden boxes or barrels.

(c) In glass or earthenware containers not over 1 pint capacity each, or in metal containers not over 1 quart capacity each, packed in strong outside fiberboard boxes.

339 (a) *Aniline oil* must be packed in specification containers as follows:

(b) *Spec. 15A, 15B, 15C, 16A, or 19A*. Wooden boxes with metal inside containers not over 10 gallons capacity each.

(c) *Spec. 5, 5A, or 5B; or 17C for single-trip container*. Metal barrels or drums. Net weight in 110-gallon drums should not exceed 915 pounds; gaskets not less than one-eighth inch thick must be used at bung and filling holes and must be made of hard fiber impregnated with glycerin, or of metal-covered cork, or of impregnated asbestos sheets, or metal-covered asbestos; filled drums must be so placed that bungs will be subjected to hydrostatic head of oil contained therein for a period of not less than 12 hours; the exterior of filled drums must be carefully examined for evidence of aniline oil, any traces of which must be removed by washing off with water or, preferably, weak acetic acid; the space between rolling hoops immediately around the bung should be painted, to aid in the detection of leaks at this point; drums showing no signs of leakage only may be shipped; all returnable drums must bear the following returnable package notice, shellacked to head of drum near consignee's name and address:

Prevent damage to foodstuffs, or other freight. Drain this drum thoroughly, tightening bungs securely in place with gaskets, before returning. If necessary, use new gaskets. Aniline oil stains on the outside of drums should be washed off with water or, preferably, weak acetic acid.

(d) *Spec. 103 or 103A*. Tank cars.

340 (a) *Arsenic acid* must be packed in specification containers as follows:

(b) As prescribed in sec. 349. When shipped in metal barrels or drums or tank cars without lead lining, the arsenic

acid must contain not over 0.05 percent nitric acid.

(c) *Spec. 1A or 1C.* Glass carboys in boxes or kegs, which must be closed, and when reused must be reconditioned and tested, as provided in the specification.

341 (a) *Carbolic acid (phenol) liquid* (liquid tar acid containing over 50 percent benzo-phenol), must be packed in specification containers as follows:

(b) As prescribed in sec. 349.

(c) *Spec. 1A or 1C.* Glass carboys in boxes or kegs, which must be closed, and when reused must be reconditioned and tested, as provided in the specification.

342 (a) *Chemical ammunition* consisting of projectiles, shells, bombs, grenades and other containers filled with gases, liquids, or chemicals, class B, without ignition elements, bursting charges, detonating fuzes, or other explosive components, must be packed for shipment in strong outside wooden or metal boxes. Boxes must be marked with name of contents and labeled as prescribed by these regulations for gases, liquids, or chemicals contained therein.

(b) *Chemical ammunition*, when shipped as such, must not be equipped or packed with explosive or ignition elements. (See secs. 55 and 57 for explosive chemical ammunition.)

344 (a) *Hydrocyanic acid solutions* must be in glass bottles not over 1 pound capacity each for solutions of not over 5 percent strength and not over 5 pounds capacity each for solutions of not over 2 percent strength, and must be packed in specification containers as follows:

(b) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes.

(c) *Spec. 11A or 11B.* Wooden barrels or kegs.

345 (a) *Liquid sodium or potassium cyanide* must be packed in specification containers as follows:

(b) *Spec. 5, 5A, or 5B.* Metal barrels or drums without galvanizing inside.

(c) *Spec. 17E or 37D* (single-trip) metal drums with welded side seams.

(d) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with inside glass or earthenware containers not over 1 gallon capacity each, or inside metal containers not over 10 gallons capacity each, and without galvanizing.

(e) *Spec. 103 or 103A.* Tank cars.

346 (a) *Methyl bromide* must be packed in specification containers as follows:

(b) *Spec. 3A300, 3B300, or 4B300.* Metal cylinders of not over 125 pounds water capacity (nominal). Valves or other closing devices must be protected, to prevent injury in transit, by screw-on metal caps or by packing the cylinders in strong boxes or crates. Cylinders less than 18 inches in length or less than 5 inches in diameter must be packed in boxes or crates. (See sec. 25.)

(c) *Spec. 15A, 15B, 15C, 16A, 19A, or 12B.* Wooden, wire-bound wooden, or fiberboard boxes, with inside metal cans containing not over 1 pound each; out-

age required so cans will not become liquid-full at 130° F. Cans must be made with body of at least 107-pound tin plate, with concave ends at least 95-pound tin plate, with all seams soldered or lined to prevent leakage, and with strength to withstand at least 130 pounds interior pressure without leakage.

(d) *Spec. 104A.* Tank cars.

(e) Outage must be sufficient to prevent tank car from becoming entirely filled with liquid at 105° F.

347 (a) *Motor fuel antiknock compound and tetraethyl lead* must be packed in specification containers as follows:

(b) *Spec. 15A.* Wooden boxes with inside glass or earthenware containers of not over 1 pint capacity each, or metal cans, inclosed in hermetically sealed (soldered) metal cans, spec. 2A.

(c) *Spec. 5 or 5A.* Metal barrels or drums.

(d) Cylinders as prescribed for any compressed gas, except acetylene.

(e) *Spec. 105A300.* Tank cars. Stencilled on both sides of the tanks "For Motor Fuel Antiknock Compound Only."

(f) Tank cars or tank vehicles are not authorized for tetraethyl lead.

(g) Outage must be sufficient to prevent any container from becoming entirely filled with liquid at 130° F.

348 (a) *Phenyldichlorarsine* must be packed in specification containers as follows:

(b) *Spec. 5A.* Metal barrels or drums, made of not less than 12 gage steel, and limited to 30 gallons capacity.

(c) Each drum must be tested, before each filling, to 20 pounds hydrostatic test.

349 (a) *Poisonous liquids as defined in sec. 336, other than those for which special requirements are prescribed*, must be packed in specification containers as follows:

(b) *Spec. 5, 5A, or 5B.* Metal barrels or drums.

(c) *Spec. 17C or 17E.* Metal drums (single-trip containers).

(d) *Spec. 37D.* Metal drums, single-trip containers, with welded side seams, not over 5 gallons capacity; 10 gallons capacity authorized when without removable head or other opening except a bung hole not over 2.3" in diameter.

(e) *Spec. 37E.* Metal drums, single-trip containers, with welded side seams, not over 5 gallons; authorized for pastes only.

(f) *Spec. 10A, 10B, or 10C.* Wooden barrels or kegs.

(g) *Spec. 11A or 11B.* Wooden barrels or kegs with glass or earthenware inside containers, not over 1 gallon capacity each, or with metal inside containers not over 2 gallons capacity each.

(h) *Spec. 12B.* Fiberboard boxes with glass or earthenware inside containers not over 1 quart capacity each, or with metal inside containers not over 1 gallon capacity each.

(i) Packages containing glass or earthenware containers must not weigh over 65 pounds gross.

(j) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes with glass or earthenware inside containers not over 1 gallon capacity each, except that inside containers up to 3 gallons are authorized when only one is packed in each outside container; or with metal inside containers, not over 10 gallons capacity each.

(k) *Spec. 103 or 103A.* Tank cars.

(l) *Cylinders* as prescribed for any compressed gas, except acetylene, are also authorized.

350 LESS DANGEROUS POISONS—CLASS B—SOLIDS—POISON LABEL

Poisonous solids (including pastes and semisolids) are substances of such nature that they are chiefly dangerous by external contact with the body or by their being taken internally as in contaminated food or feeds.

Packing

351 (a) *Closing and cushioning.* All containers must be tightly and securely closed. Inside containers must be cushioned as prescribed, or in any case when necessary to prevent breakage or leakage.

(b) *Testing inside containers.* All inside containers, except those made of glass, must be able to pass a test by dropping, after filling, from a height of 4 feet to solid concrete without rupture or sifting of contents, except that for bags with contents weighing 25 pounds, a drop test of 2 feet is required.

352 (a) *Poisonous solids, class B*, except cyanides, other than as specified in sec. 357 (b), in tightly closed inside containers, securely cushioned when necessary to prevent breakage and packed as follows are exempt from specification packaging and labeling requirements:

(b) In inside glass, earthenware, or metal containers, or lock-corner sliding-lid wooden boxes, of not over 5 pounds capacity each, or chipboard, pasteboard, or fiber cartons, cans, or boxes, of not over 1 pound capacity each, packed in outside wooden or fiberboard boxes, or wooden barrels or kegs. Net weight of contents of outside container, not over 100 pounds.

(c) In inside chipboard, pasteboard, or fiber cartons, cans, or boxes, of not over 5 pounds capacity each, packed with other articles in outside fiberboard or wooden boxes. Not more than 5 of these cartons shall be packed in any outside container.

353 (a) *Arsenic (arsenic trioxide) or arsenic acid (solid)* must be packed in specification containers as follows:

(b) As prescribed in sec. 361.

(c) *Spec. 10A, 10B, or 10C.* Wooden barrels or kegs with tongued-and-grooved staves; a 4½-inch metal bung in the head is permitted; lining not required.

(d) *Spec. 37E.* Metal drums not over 100 pounds each.

(e) (1) Import shipments of arsenic (arsenic trioxide) may also be shipped when packed as follows:

(e) (2) Inclosed in strong water-proofed cloth containers, securely sewn and closed so as to provide a sift-proof package, and then packed in strong, tight, metal-strapped wooden boxes constructed of material not less than three-fourths inch thick throughout.

(e) (3) In strong and tight metal drums inclosed in a strong outside wooden barrel.

354 (a) *Arsenical compounds n. o. s., arsenate of lead, calcium arsenate, Paris green, and arsenical mixtures* must be packed in specification containers as follows:

(b) As prescribed in sec. 361.

(c) *Spec. 36A or 36B.* Triplex bags. Authorized only for arsenical insecticides and fungicide dusting mixtures containing 8.0 percent or less of arsenic trioxide (As_2O_3).

(d) *Spec. 44B.* Paper bags with inside paper bags, spec. 2D; or bulk packing (inside containers not required) for carload and truckload shipments only. Net weight not over 50 pounds each.

355 *Arsenical dust* not subject to dangerous spontaneous heating and *arsenic trioxide*, or *sodium arsenate*, when delivery is made to plants with private sidings, only, may, in addition to containers prescribed in sec. 354, be shipped in sift-proof, self-clearing, hopper or bottom-outlet steel cars, equipped with waterproof and dustproof covers well secured in place for all openings. (See sec. 567 (a) and (b). *Cleaning Cars.*)

356 (a) *Carbolic acid (phenol), not liquid*, must be packed in specification containers as follows:

(b) As prescribed in sec. 361.

(c) *Spec. 11A, or 11B.* Wooden barrels or kegs with securely closed inside drums of metal not thinner than No. 26 gage, the space between drum and barrel or keg being filled with sawdust or rice hulls.

(d) *Spec. 15A, 15B, or 15C.* Wooden boxes with metal inside containers, spec. 2F, not over 250-pounds total capacity each.

(e) *Spec. 37G.* Metal drums securely cushioned with sawdust or rice hulls in outside wooden barrels. Net weight of contents not over 250 pounds. Outside containers must be marked as prescribed in sec. 25.

(f) *Spec. 17E.* Metal drums. Net weight not over 450 pounds.

(g) *Spec. 42B or 42C.* Aluminum drums.

357 (a) (1) *Cyanides, or cyanide mixtures*, if containing the cyanogen equivalent of 10 percent or more of potassium cyanide, must be packed in specification containers as follows (see sec. 357 (b) for exemptions):

(a) (2) *Spec. 15A, 15B, or 15C.* Wooden boxes with metal inside con-

tainers, spec. 2F, not over 25 pounds capacity each; or hermetically sealed (soldered) metal lining, spec. 2F, or in glass bottles not over 5 pounds capacity each.

(a) (3) *Spec. 11A or 11B.* Wooden barrels with metal inside containers, spec. 2F, not over 25 pounds capacity each; or hermetically sealed (soldered), metal lining, spec. 2F.

(a) (4) *Spec. 12B or 12C.* Fiberboard boxes with metal inside containers, spec. 2F.

(a) (5) *Spec. 5, 5A, 5B, 6A, 6B, or 6C.* Metal barrels or drums.

(a) (6) *Spec. 37H.* Metal drums (single-trip container), made watertight; must be hermetically sealed (soldered) when used for calcium cyanide.

(a) (7) Bulk in airtight metal cars.

(a) (8) *Spec. 37D.* Metal drums (single-trip container), with welded side seams; all seams and closure must be watertight; maximum net weight not over 100 pounds.

(b) (1) *Cyanides* when packed and described as follows are exempt from specification packaging and labeling requirements:

(b) (2) *Cyanides* in tightly closed glass, earthenware, or metal inside containers, not over one pound each, securely cushioned when necessary to prevent breakage, and packed in outside wooden or fiberboard boxes, or in wooden barrels. Net weight of cyanides in any outside container, not over 25 pounds.

(b) (3) *Cyanide mixtures* in tightly closed glass, earthenware, or metal inside containers, securely cushioned when necessary to prevent breakage, and packed in outside wooden or fiberboard boxes or in wooden barrels. Net weight of cyanide mixtures in any outside container, not over 5 pounds.

(b) (4) *Cyanides of copper, zinc, lead and silver.*

359 (a) *Mercury bichloride* must be packed in specification containers as follows:

(b) As prescribed in sec. 361.

(c) *Spec. 15A.* Wooden boxes with inside containers consisting of strong paper bags in tightly closed inside wooden boxes.

360 (a) *Paranitraniline* must be packed in specification containers as follows:

(b) As prescribed in sec. 361.

(c) *Spec. 11A.* Wooden barrels, gross weight 385 pounds; must be shipped in carload or truck shipments only, and must not be offered for transportation by carriers by rail express or water.

361 (a) *Poisonous solids, as defined in sec. 350, other than those for which special requirements are prescribed*, must be packed in specification containers as follows:

(b) *Spec. 5, 5A, 5B, 6A, 6B, or 6C.* Metal barrels or drums.

(c) (1) *Spec. 17E or 37D.* Metal drums (single-trip containers). Gross weight not over 300 pounds.

(c) (2) For materials fused solid in the drum a gross weight of 880 pounds is authorized.

(d) *Spec. 37H.* Metal drums (single-trip). Net weight not over 200 pounds each.

(e) *Spec. 10A, 10B, or 10C.* Wooden barrels or kegs lined with creped-paper bag, spec. 2J. Liner may be omitted if material is not pulverized or liable to sift.

(f) *Spec. 11A.* Wooden barrels or kegs, tongued and grooved, net weight of contents not over 115 pounds each.

(g) *Spec. 12B or 12C.* Fiberboard boxes, with inside containers which must be: Metal cans not over 25 pounds capacity each; glass bottles not over 1 gallon capacity each; fiber cans or boxes, spec. 2G; sliding-top wooden boxes, lined to prevent sifting, not over 25 pounds capacity each; or paper bags, spec. 2D. Packages containing glass or earthenware containers must not weigh over 65 pounds gross nor contain more than 4 inside containers of over 5 pints capacity each. Outside containers must be not over 5,000-cubic-inches capacity nor contain over 50 pounds net weight each. (See note and test.)

NOTE: All butt seams of all boxes must be covered with kraft tape not less than 3 inches in width and having strength, Mullen or Cady test, of not less than 60 pounds before gumming, extending over the edges and at least 2 inches down the sides of the box. All open edges and the eight corners of fiberboard and corrugated strawboard boxes must be sealed with No. 1 kraft tape not less than 3 inches wide and having a strength, Mullen or Cady test, of not less than 60 pounds before gumming. The use of other tapes of equal or superior strength is authorized.

Tape not required on manufacturers joint that is both glued and stitched.

Test. The completed package prepared as for shipping must be capable of standing a drop of 4 feet to solid concrete without breakage of the container or any sifting of contents.

(h) *Spec. 15A.* Wooden boxes, with inside containers which must be securely closed paper bags, placed within a waterproof duplex bag, spec. 2J. Net weight of material in one outside box, not over 100 pounds.

(i) *Spec. 15A, 15B, 15C, 16A, or 19A.* Wooden boxes, with inside containers which must be: Metal cans not over 25 pounds capacity each; glass or earthenware containers not over 1 gallon capacity each; except that inside containers of not over 5 gallons each and containing not over 25 pounds net weight are authorized when only one inside container is packed in each outside container. Fiber cans or boxes, spec. 2G; or sliding-top wooden boxes, lined to prevent sifting, not over 25 pounds capacity each. Net weight of material in outside container, not over 100 pounds each.

(j) *Spec. 18B.* Wooden kits lined as prescribed by spec. 2K. Net weight not over 30 pounds each.

(k) *Spec. 21A.* Fiber drums. Net weight not over 115 pounds each.

(l) *Spec. 22A.* Plywood drums. Net weight not over 115 pounds each.

(m) *Spec. 103 or 103A.* Tank cars.

362 TEAR GAS OR IRRITATING SUBSTANCES
CLASS C—TEAR GAS LABEL

(a) *Tear gases are liquid or solid substances which upon contact with fire or when exposed to air give off dangerous or intensely irritating fumes, such as brombenzylcyanide, chloracetophenone, diphenylaminechlorarsine, and diphenylchlorarsine, but not including any poisonous article, class A.*

(b) *Closing and cushioning.* All containers must be tightly and securely closed. Inside containers must be cushioned as prescribed, or in any case when necessary to prevent breakage or leakage.

363 (a) *Tear gas or irritating substances, class C, as defined in sec. 362 (a) for which special packing is not prescribed, must be packed in specification containers as follows:*

(b) *Spec. 5, 5A, or 5B.* Metal barrels or drums.

(c) *Spec. 6A, 6B, or 6C.* Metal barrels or drums.

(d) *Spec. 15A or 15B.* Wooden boxes with inside metal containers of not over 1 liquid gallon (10 pounds) capacity each. Not over 8 liquid gallons (80 pounds) of material may be packed in any outside container.

(e) Cylinders as prescribed for any compressed gas, except acetylene, are also authorized for use. These cylinders must be qualified, maintained, and filled in accordance with sec. 303, if used for material with pressure exceeding 25 pounds per square inch at 70° F., they must also be retested as required by sec. 303.

364 (a) *Chemical ammunition* consisting of projectiles, shells, bombs, and other containers, except grenades, filled with gases, liquids, or chemicals class C without ignition elements, bursting charges, detonating fuzes, or other explosive components, must be packed for shipment in strong outside wooden or metal boxes. Boxes must be marked with name of contents and labeled as prescribed by these regulations for the gases, liquids, or chemicals contained therein.

(b) *Chemical ammunition, when shipped as such, must not be equipped or packed with explosive or ignition elements (see secs. 55 and 57 for explosive chemical ammunition).*

364A (a) *Monochloroacetone, stabilized, must be packed in specification containers as follows:*

(b) *Spec. 5A, 5, or 17C.* Metal barrels or drums not over 5 gallons capacity each.

365 (a) *Police grenades, class C, tear gas grenades, tear gas candles, or similar devices containing lachrymatory (tear producing) substances, for civil use, must be packed in specification containers as follows (see sec. 66 for packing for tear gas cartridges):*

(b) *Spec. 15A, 15B, or 15C.* Metal-strapped wooden boxes. Functioning elements not assembled in grenades or devices must be in a separate compartment of these boxes, or in inside or separate outside boxes, spec. 15A, 15B, or 15C, and must be so packed and cushioned that they may not come in contact with each other or with the walls of boxes during transportation. Not more than 24 grenades and 24 functioning devices shall be packed in one outside container and the gross weight of the package must not exceed 75 pounds.

(c) These articles must not be assembled with or packed in the same compartment with mechanically or manually operated firing, igniting, bursting, or other functioning elements, unless of a type or design approved by the Bureau of Explosives.

(d) Pending approval by the Commission of regulations classifying the numerous devices within the general descriptions of this paragraph, and providing appropriate restrictions to be observed in the transportation thereof, no shipment of packages containing articles under this paragraph shall be made until samples thereof have been examined by the Bureau of Explosives or by other competent testing laboratory in the presence of representative of the Bureau of Explosives, and the shipment is shown to possess such resistance to shocks of transportation and protection against leakage of contents as are afforded by standard types of packages described in regulations published herein, and the packages are labeled or marked to show compliance with this paragraph.

Note: Grenades or other similar devices may be shipped completely assembled when shipments are made by, for, or to the War or Navy Department of the United States Government, provided the functioning element is so packed that it cannot accidentally function. The outside containers must be metal-strapped wooden boxes, spec. 15A, 15B, or 15C.

MARKING AND LABELING EXPLOSIVES AND OTHER DANGEROUS ARTICLES

Note: The markings prescribed for containers should be as near together as possible.

400 (a) *Explosives.* Each package containing explosives must be marked with its proper shipping name as shown herein and such other marking as prescribed for the explosive in the shipment.

(b) Packages containing explosives must show on top the marking "THIS SIDE UP" when required by sec. 60 (e) (2) and sec. 61 (h).

(c) Each package of explosives must show the name and address of the consignee except in carloads and truckloads or less-than-truckloads when handled by a motor vehicle not requiring transfer from one motor carrier to another. When offered for transportation by carrier by water each package must show the name or mark of the consignor and/or consignee.

(d) Each package of explosives containing a poison gas or tear gas must

also have securely attached to it the labels prescribed by sec. 404 (j) or sec. 404 (l).

(e) Each shipment of samples of explosives when offered for transportation by carriers by rail express or water must bear the label prescribed by sec. 404 (m) and each shipment of fireworks in addition to the marking prescribed by sec. 64 (e) when offered for transportation by carriers by rail express or water must bear the label prescribed by sec. 404 (m).

(f) Each package of explosives must be marked with the I. C. C. specification number as prescribed by the specification, if an I. C. C. specification container is required.

401 (a) *Dangerous articles.*—Packages containing inflammable liquids, inflammable solids, oxidizing materials, corrosive liquids, compressed gases, and poisons, as defined herein must be marked with the proper shipping name as shown in the commodity list of these regulations. For tank cars this marking must appear either on the placards or commodity cards.

(b) Each package of dangerous articles must show the name and address of the consignee except in carloads and truckloads or less-than-truckloads when handled by a motor vehicle not requiring transfer from one motor carrier to another.

(c) Packages containing inflammable liquids with inside containers of one quart or larger and corrosive liquids in any quantity, except when packed in carboys not completely boxed, must be marked on top "THIS SIDE UP."

(d) Each package must show the specification marking as required if a specification container is prescribed.

(e) Additional shipping information not inconsistent with these rules and regulations may be shown on a container if so desired but no such label or marking shall be of a design, or form, or size, as may be confused with the marking required by these regulations.

402 (a) Each package containing any dangerous article as defined by these regulations must be conspicuously labeled by the shipper as follows, except as otherwise provided:

(b) "Red label" as described in sec. 404 (e) on containers of inflammable liquids, except when exempted from the regulations by sec. 103.

(c) "Yellow label" as described in sec. 404 (f) on containers of inflammable solids and oxidizing materials, except when exempted from the regulations by sec. 153 and sec. 183.

(d) "White label" as described in sec. 404 (g) on containers of acids or corrosive liquids, except when exempted from the regulations by sec. 244.

(e) "Red label" as described in sec. 404 (h) on containers of inflammable compressed gases, except when exempted from the regulations by sec. 302.

(f) "Green label" as described in sec. 404 (i) on containers of noninflammable

compressed gases, except when exempted from the regulations by sec. 302.

(g) "Poison gas" label as described in sec. 404 (j) on containers of class A poisons.

(h) "Poison" label as described in sec. 404 (k) on containers of class B poison liquids or solids, except when exempted from the regulations by secs. 333 and 352.

(i) "Tear gas" label as described in sec. 404 (l) on containers of poisons, class C.

(m) "Bung label" as described in sec. 110 (c) (13) on metal barrels or drums containing inflammable liquids with vapor pressure exceeding 16 pounds per square inch absolute.

(n) "Empty label" as described in sec. 404 (r) must be applied to containers which have been empty and on which the old label has not been removed, obliterated, or destroyed. It must be so placed on the container as to completely cover the old label.

(o) Labels when applied to packages offered for transportation by rail express or rail baggage must show shipper's name in printing, stamping, or writing underneath the certificate printed thereon.

(p) Labels are not required on shipments forwarded in carload or truckload quantities by rail freight, rail express or highway when such shipments are to be unloaded by the consignee. This exception does not apply to class A and class C poisons.

(q) When it is known that subsequent shipments of these packages in less-than-carload or less-than-truckload quantities will probably be made by the consignee, the original shipper should attach labels to the packages as would be required for less-than-carload or less-than-truckload shipments.

403 LABELS FOR MIXED PACKING

(a) Use *red label only* when red and other labels are prescribed.

(b) Use *white acid label only* (corrosive liquid) when white acid and yellow or poison labels are prescribed.

(c) Use *yellow label only* when yellow and poison labels are prescribed.

404 LABELS

(a) Shippers must furnish and attach the labels prescribed for their packages. Labels should be applied to that part of the package bearing consignee's name and address.

(b) Labels must not be applied to packages containing articles which are not subject to these regulations.

(c) Shippers must not use labels which by their size, shape, and color, may readily be confused with the standard caution labels prescribed herein.

(d) (1) Labels must conform to standards as to size, printing, and color, and

samples will be furnished, on request, by the Bureau of Explosives.

(d) (2) A combination diamond-shaped label-tag of proper size and color, bearing on one side the shipping information and on the reverse side the wording prescribed herein, will be permitted.

(e) Labels for inflammable liquids must be of diamond shape, bright red in color, and with each side 4 inches long. Printing must be in black letters inside of a black-line border measuring 3½ inches on each side and as shown below:

RED LABEL FOR INFLAMMABLE LIQUIDS

(Reduced size)

[Black printing on red]



(f) Labels for inflammable solids and oxidizing materials must be of diamond shape, bright yellow in color, and with each side 4 inches long. Printing must be in black letters inside of a black-line border measuring 3½ inches on each side and as shown below.

YELLOW LABEL FOR INFLAMMABLE SOLIDS AND OXIDIZING MATERIALS

(Reduced size)

[Black printing on yellow]

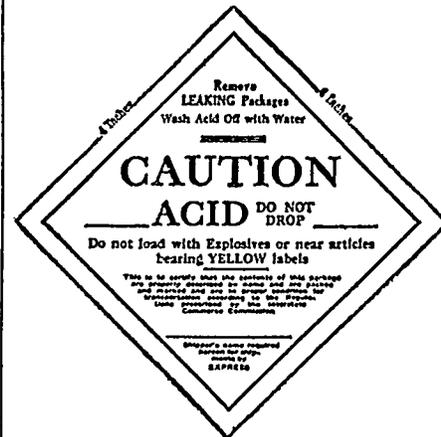


(g) Labels for corrosive liquids must be of diamond shape, white in color, and with each side 4 inches long. Printing must be in black letters inside of a black-line border measuring 3½ inches on each side and as shown below.

WHITE LABEL FOR ACIDS AND CORROSIVE LIQUIDS

[Reduced size]

[Black printing on white]



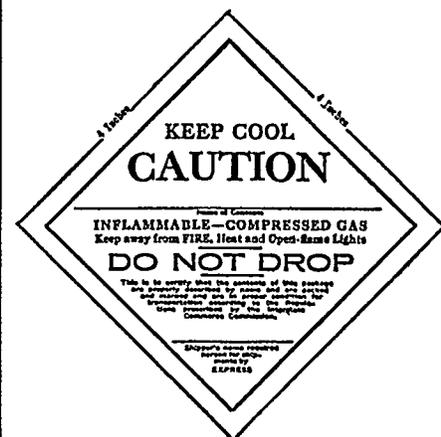
For corrosive liquids other than acid, the words "CORROSIVE LIQUID" may be substituted for the word "ACID" on the white "Acid" labels, if desired.

(h) Labels for compressed gases must be of diamond shape, bright red in color for inflammable gases and bright green for noninflammable gases, and with each side 4 inches long. Printing must be in black letters inside of a black-line border measuring 3½ inches on each side and as shown below.

RED LABEL FOR INFLAMMABLE GASES

(Reduced size)

[Black printing on red]



(d) GREEN LABEL FOR NONINFLAMMABLE GASES

[Reduced size]
[Black printing on green]



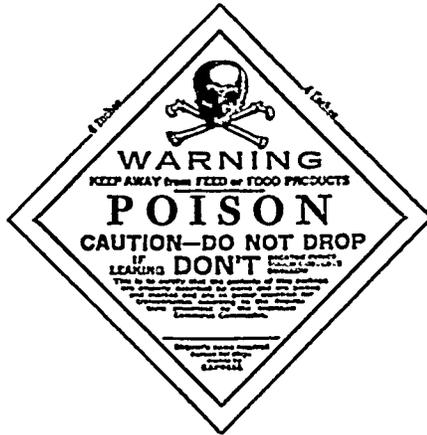
(j) Labels for poisonous articles and tear gases must be of diamond shape, white in color, and with each side 4 inches long. Printing must be in red letters inside of a red-line border measuring 3½ inches on each side and as shown below.

POISON GAS LABEL
[Reduced size]
[Red printing on white]



(k) POISON LABEL

[Reduced size]
[Red printing on white]



(l) TEAR GAS LABEL

[Reduced size]
[Red printing on white]



(m) Labels for fireworks must be square measuring 4 inches on each side and bright red in color. Printing must be in black letters inside of a black-line border measuring 3½ inches on each side and as shown below.

RED LABEL FOR FIREWORKS

[Reduced size]
[Black printing on red]



(n) Labels for samples of explosives for laboratory examination must be square measuring 4 inches on each side and bright red in color. Printing must be in black letters inside of a black-line border measuring 3½ inches on each side and as shown below.

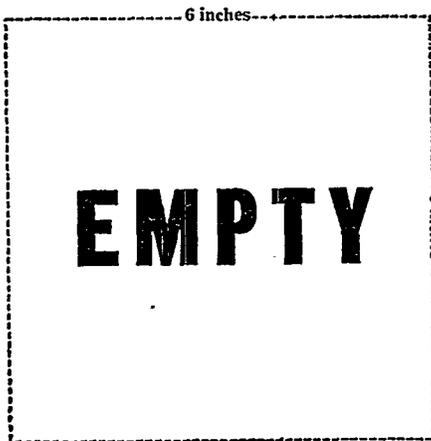
RED LABEL FOR SAMPLES OF EXPLOSIVES
[Reduced size]
[Black printing on red]



(r) Labels for empty containers must be 6 inches on each side, white in color, and printed in letters 1½ inches high in black ink and as shown below.

WHITE LABEL FOR EMPTY CONTAINERS

[Reduced size]



(s) The carrier's name and stationery form number, or the shipper's name and address, may be printed on the labels, in type not larger than 10 point, if placed within the black-line border and in the upper or lower corner of the diamond.

*SHIPPING INSTRUCTIONS

415 "ORDER-NOTIFY," "C. O. D.," AND "STOP-OFF" SHIPMENTS

(a) Except on through bills of lading to a foreign country, shipments of dangerous explosives class A and blasting caps in any quantity must not be offered for transportation by carriers by rail freight or rail express when consigned "to order notify" or "C. O. D." Shippers must not consign these shipments to themselves at points where they have not a resident representative.

(b) Dangerous explosives class A must not be offered for transportation by carriers by rail freight or rail express subject to "stop-off" privileges en route for partial loading or unloading.

416 CARS FUMIGATED WITH INFLAMMABLE LIQUIDS

Delivery to carrier of cars fumigated with inflammable liquids is prohibited until 48 hours have elapsed after fumigation.

417 SHIPPING ORDER AND BILL OF LADING DESCRIPTION

The shipper when offering for transportation by carriers by rail freight, rail express, highway, or water any class A, class B, or class C explosive, inflammable liquid, inflammable solid, oxidizing material, corrosive liquid, compressed gas, or poison, as defined by these regulations, must describe such article in the shipping order, bill of lading or other shipping paper by the shipping name used herein (see commodity list) and

may add a further description not inconsistent therewith. Abbreviations must not be used.

NOTE: In commodity list shipping names are shown in roman, not *italics*.

418 LABEL OR PLACARD NOTATION

The shipping order, bill of lading or other shipping paper must also show thereon in connection with the entry of the article as prescribed in sec. 417, the color or kind of label applied, and for cars containing such articles loaded by the shipper, requiring placards the kind of placard applied to the car.

419 RECEIPTS

(a) A receipt upon the form prescribed by the originating rail express carrier must be issued to the shipper for each shipment of explosives or other dangerous articles accepted for transportation. Before a receipt is issued, the shipper must apply the label prescribed herein to each package containing any articles covered by these regulations.

(b) Each receipt must show the proper and definite name of commodity, as listed in these regulations, and the color of the label applied to the package if any is required.

421 CERTIFICATE

The shipper offering for transportation by carriers by rail freight, highway, or water any class A or class B explosive and blasting caps or electric blasting caps in any quantity, and any inflammable liquid, inflammable solid, oxidizing material, corrosive liquid, compressed gas, or poison requiring labels, as prescribed by these regulations must show on the shipping order, bill of lading or other shipping paper in the lower left-hand corner the following certificate over the written or stamped facsimile signature of the shipper or his duly authorized agent:

This is to certify that the above articles are properly described by name and are packed and marked and are in proper condition for transportation according to the regulations prescribed by the Interstate Commerce Commission.

422 SWITCHING TICKET

When the initial movement is a switching operation, the switching order, switching receipt or switching ticket, and copies thereof, prepared by the shipper, must bear the placard indorsement and the shipper's certificate prescribed by sec. 418 (a) and sec. 421.

423 TANK CAR SHIPMENTS

(a) Tank cars containing *inflammable liquids* having a flash point of 80° F. or below, except liquid road asphalt or tar, must not be offered for shipment unless originally consigned or subsequently re-consigned to parties having private-siding (see Note 1) or railroad-siding facilities equipped for piping the liquid from

tank cars to permanent storage tanks of sufficient capacity to receive contents of car.

(b) No tank car containing *compressed gas* may be offered for transportation unless the car is consigned for delivery and unloading on a private track (see Note 1), except that where no private track is available, delivery and unloading on carrier tracks is permitted provided the following conditions are complied with:

(c) Any tank car of ICC-106A type may be delivered and the loaded unit tanks may be removed from car frame on carrier tracks, if, before car is offered for transportation, the shipper has obtained from the delivering carrier and filed with originating carrier, written permission (see Note 2) for such removal. The consignee must furnish adequately safe mechanical hoist, obtained from the carrier if desirable, by which the tanks are lifted from the car and deposited directly upon vehicles furnished by the consignee for immediate removal from carrier property or tanks must be lifted by adequately safe mechanical hoist from car directly to vessels for further transportation.

(d) Any tank car of other than ICC-106A type, containing liquefied hydrocarbon or liquefied petroleum gas, and having interior pipes of liquid and gas discharge valves equipped with check valves, may be delivered and unloaded on carrier tracks, if the lading is piped directly from car to permanent storage tanks of sufficient capacity to receive entire contents of car.

NOTE 1: For this purpose, a private track is a track outside of carrier's right-of-way, yard, and terminals, and of which the carrier does not own either the rails, ties, roadbed or right-of-way; or a track or portion of a track which is devoted to the purpose of its user, either by lease or written agreement, in which case the lease or written agreement will be considered as equivalent to ownership.

NOTE 2: Carriers should give permission for the unloading of these containers on carrier tracks only where no private siding is available within reasonable trucking distance of final destination. The danger involved is the release of chlorine gas due to accidental injury to container in handling. The exposure to this danger decreases directly with the isolation of the unloading point.

(e) For cars of the ICC-106A type, the tanks must be placed in position and attached to the car structure by the shipper.

(f) Inflammable liquids must not be loaded into tank cars on carriers' property from tank trucks, wagons or drums.

424 MARKING ON MOTOR VEHICLES

See regulations for marking on motor vehicles contained in Motor Carrier Safety Regulations, Revised, Part 7.

[Here follows the Shipping Container Specifications of Part 3, and Parts 4 to 8, inclusive, which will appear in the next two issues.]

[F. R. Doc. 40-5395; Filed, December 6, 1940; 10:03 a. m.]

ORDER IN THE MATTER OF ANNUAL REPORTS FROM SWITCHING AND TERMINAL COMPANIES OF CLASS III

At a session of the Interstate Commerce Commission, Division 1, held at its office in Washington, D. C., on the 26th day of November, A. D. 1940.

The subject of the requirement of annual reports from switching and terminal companies being under consideration:

It is ordered:

1. That the order of this Commission dated January 23, 1940, In the Matter of Annual Reports from Switching and Terminal Companies of Class III, is hereby annulled.

2. That all switching and terminal companies of Class III within the scope of Section 20, Part I, of the Interstate Commerce Act be, and they hereby are, required to file an annual report for the year ended December 31, 1940, and for each succeeding year until further order, in accordance with Annual Report Form D (Small Switching and Terminal Companies), which is hereby approved and made a part of this order.¹

It is further ordered, That the annual report shall be filed in duplicate in the Bureau of Statistics, Interstate Commerce Commission, Washington, D. C., on or before March 31 of the year following the one to which it relates.

By the Commission, division 1.

[SEAL] W. P. BARTEL,
Secretary.

[F. R. Doc. 40-5525; Filed, December 11, 1940; 11:41 a. m.]

Notices

TREASURY DEPARTMENT.

Bureau of Public Debt.

[1940 Department Circular 646]

OFFERING OF 3/4 PERCENT TREASURY NOTES OF SERIES B-1945, NATIONAL DEFENSE SERIES

DECEMBER 11, 1940.

I. OFFERING OF NOTES

1. The Secretary of the Treasury, pursuant to the authority of the Second Liberty Bond Act, approved September 24, 1917, as amended, invites subscriptions, at par and accrued interest, from the people of the United States for 3/4 percent notes of the United States, designated Treasury Notes of Series B-1945, National Defense Series. The amount of the offering is \$500,000,000, or thereabouts.

II. DESCRIPTION OF NOTES

1. The notes will be dated December 18, 1940, and will bear interest from that

¹ Filed as a part of the original document. No. 241—8

date at the rate of 3/4 percent per annum, payable on a semiannual basis on June 15 and December 15 in each year until the principal amount becomes payable. They will mature December 15, 1945, and will not be subject to call for redemption prior to maturity.

2. The notes shall be exempt, both as to principal and interest, from all taxation now or hereafter imposed by the United States, any State, or any of the possessions of the United States, or by any local taxing authority, except (a) estate or inheritance taxes, or gift taxes, and (b) all income, excess-profits, and war-profits taxes, now or hereafter imposed by the United States, upon the income or profits of individuals, partnerships, associations, or corporations.

3. The notes will be accepted at par during such time and under such rules and regulations as shall be prescribed or approved by the Secretary of the Treasury in payment of income and profits taxes payable at the maturity of the notes.

4. The notes will be acceptable to secure deposits of public moneys, but will not bear the circulation privilege.

5. Bearer notes with interest coupons attached will be issued in denominations of \$100, \$500, \$1,000, \$5,000, \$10,000, and \$100,000. The notes will not be issued in registered form.

6. The notes will be subject to the general regulations of the Treasury Department, now or hereafter prescribed, governing United States notes.

III. SUBSCRIPTION AND ALLOTMENT

1. Subscriptions will be received at the Federal Reserve Banks and Branches and at the Treasury Department, Washington. Banking institutions generally may submit subscriptions for account of customers, but only the Federal Reserve Banks and the Treasury Department are authorized to act as official agencies. Others than banking institutions will not be permitted to enter subscriptions except for their own account. Subscriptions from banks and trust companies for their own account will be received without deposit but will be restricted in each case to an amount not exceeding one-half of the combined capital and surplus of the subscribing bank or trust company. Subscriptions from all others must be accompanied by payment of 10 percent of the amount of notes applied for.

2. The Secretary of the Treasury reserves the right to reject any subscription, in whole or in part, to allot less than the amount of notes applied for, and to close the books as to any or all subscriptions at any time without notice; and any action he may take in these respects shall be final. Allotment notices will be sent out promptly upon allotment, and the basis of the allotment will be publicly announced.

IV. PAYMENT

1. Payment at par and accrued interest, if any, for notes allotted hereunder must be made or completed on or before December 18, 1940, or on later allotment. In every case where payment is not so completed, the payment with application up to 10 percent of the amount of notes applied for shall, upon declaration made by the Secretary of the Treasury in his discretion, be forfeited to the United State. Any qualified depository will be permitted to make payment by credit for notes allotted to it for itself and its customers up to any amount for which it shall be qualified in excess of existing deposits, when so notified by the Federal Reserve Bank of its district.

V. GENERAL PROVISIONS

1. As fiscal agents of the United States, Federal Reserve Banks are authorized and requested to receive subscriptions, to make allotments on the basis and up to the amounts indicated by the Secretary of the Treasury to the Federal Reserve Banks of the respective districts, to issue allotment notices, to receive payment for notes allotted, to make delivery of notes on full-paid subscriptions allotted, and they may issue interim receipts pending delivery of the definitive notes.

2. The Secretary of the Treasury may at any time, or from time to time, prescribe supplemental or amendatory rules and regulations governing the offering, which will be communicated promptly to the Federal Reserve Banks.

[SEAL] H. MORGENTHAU, Jr.,
Secretary of the Treasury.

[F. R. Doc. 40-5526; Filed, December 11, 1940; 11:52 a. m.]

WAR DEPARTMENT.

[Contract No. W 227 sc-2576, File No. 1470 NY-41, OCSO-DP-41-649]

SUMMARY OF CONTRACT FOR SUPPLIES

CONTRACTOR: AIRCRAFT RADIO CORPORATION, ECONTON, NEW JERSEY

Contract for: Radio Receivers * * *, and Associated Equipment. Amount: \$3,960,997.50.

Place: New York Signal Corps Procurement District, 1st Avenue and 58th Street, Brooklyn, New York.

The supplies and services to be obtained by this instrument are authorized by, are for the purpose set forth in, and are chargeable to Procurement Authorities:

SC-1313-P-5-3053-A-0605-01, (\$1,162,762.50)
SC-1630-P-5-3053-A(0605).107-01, (\$2,798,235.00)

the available balances of which are sufficient to cover the cost of same.

This Contract, entered into this 31st day of October 1940.

Scope of this contract. The contractor shall furnish and deliver to the Government * * * Radio Receivers * * * and Associated equipment, for the consideration stated Three million nine hundred sixty thousand nine hundred ninety-seven and 50/100 (\$3,960,997.50), in strict accordance with the specifications, schedules and drawings, all of which are made a part hereof.

Changes. Where the supplies to be furnished are to be specially manufactured in accordance with drawings and specifications, the contracting officer may at any time, by a written order, and without notice to the sureties, make changes in the drawings or specifications, except Federal Specifications. Changes as to shipment and packing of all supplies may also be made as above provided.

Delays—Damages. If the contractor refuses or fails to make deliveries of the materials or supplies within the time specified in Article 1, or any extension thereof, the Government may by written notice terminate the right of the contractor to proceed with deliveries or such part or parts thereof as to which there has been delay.

Payments. The contractor shall be paid, upon the submission of properly certified invoices or vouchers, the prices stipulated herein for articles delivered and accepted or services rendered, less deductions, if any, as herein provided. Unless otherwise specified, payments will be made on partial deliveries accepted by the Government when the amount due on such deliveries so warrants; or, when requested by the contractor, payments for accepted partial deliveries shall be made whenever such payments would equal or exceed either \$1,000 or 50 percent of the total amount of the contract.

Performance bond. Bond, with surety satisfactory to the contracting officer, guaranteeing the faithful performance of the provisions of this contract shall be furnished herewith in the sum of twenty-five (25%) percent of the total consideration of this contract.

Amount: \$990,249.38.

The Government reserves the right at any time within _____ calendar days from and after date of receipt by the contractor of the executed number of this contract to increase the quantity or quantities of the supplies called for herein at not more than the unit prices stated.

Award made pursuant to the authority contained in section 1 (a) of the Act of Congress approved July 2, 1940. (Pub. No. 703, H. R. 9850)

NEAL H. MCKAY,
Major, Quartermaster Corps,
Assistant to the Director of
Purchases and Contracts.

[F. R. Doc. 40-5504; Filed, December 11, 1940; 9:49 a. m.]

[Contract No. W 6116 qm-2 O. I. No. 2-41]

SUMMARY OF COST-PLUS-A-FIXED-FEE
CONSTRUCTION CONTRACT

CONTRACTOR: JOHN GRIFFITHS & SON CONSTRUCTION COMPANY, 228 NORTH LASALLE STREET, CHICAGO, ILLINOIS

Fixed-fee: \$141,912.00.

Contract for: Construction of Replacement and Reception Center, including necessary buildings, temporary structures, utilities and appurtenances thereto. Place: Camp Grant, Illinois.

Estimated cost of project: \$3,638,773.

The supplies and services to be obtained by this instrument are authorized by, are for the purpose set forth in, and are chargeable to the following procurement authorities, the available balances of which are sufficient to cover the cost of the same: QM 7914 PI-3211 AO540.068-N.

This Contract, entered into this 31st day of October 1940.

Statement of work. The Contractor shall, in the shortest possible time, furnish the labor, materials, tools, machinery, equipment, facilities, supplies not furnished by the Government, and services, and do all things necessary for the completion of the following work: Construction of a replacement and reception center, including necessary buildings at Camp Grant, Illinois.

It is estimated that the total cost of the construction work covered by this contract will be approximately three million six hundred thirty-eight thousand seven hundred seventy-three dollars (\$638,773.00), exclusive of the Contractor's fee.

In consideration for his undertaking under this contract the Contractor shall receive the following:

- (a) Reimbursement for expenditures as provided in article II.
- (b) Rental for Contractor's equipment as provided in article II.
- (c) A fixed fee in the amount of one hundred forty-one thousand nine hundred twelve dollars (\$141,912.00), which shall constitute complete compensation for the Contractor's services, including profit and all general overhead expenses.

The Contracting Officer may, at any time, by a written order and without notice to the sureties, make changes in or additions to the drawings and specifications, issue additional instructions, require additional work, or direct the omission of work covered by the contract.

The title to all work, completed or in the course of construction, shall be in the Government. Likewise, upon delivery at the site of the work or at an approved storage site and upon inspection and acceptance in writing by the Contracting Officer, title to all materials, tools, machinery, equipment, and supplies, for which the Contractor shall be

entitled to be reimbursed under article II, shall vest in the Government.

Payments—Reimbursement for cost. The Government will currently reimburse the Contractor for expenditures made in accordance with article II upon certification to and verification by the Contracting Officer of the original signed pay rolls for labor, the original paid invoices for materials, or other original papers. Generally, reimbursement will be made weekly but may be made at more frequent intervals if the conditions so warrant.

Rental for contractor's equipment. Rental as provided in article II for such construction plant or parts thereof as the Contractor may own and furnish shall be paid monthly upon presentation of proper vouchers.

Payment of the fixed-fee. The fixed-fee prescribed in article I shall be compensation in full for the services of the Contractor, including profit and all general overhead expenses. Ninety percent (90%) of said fixed-fee shall be paid as it accrues, in monthly installments based upon the percentage of the completion of the work as determined from estimates made and approved by the Contracting Officer. Upon completion of the work and its final acceptance, any unpaid balance of the fee shall be paid to the Contractor.

Termination of contract by Government. Should the Contractor at any time refuse, neglect, or fail to prosecute the work with promptness and diligence, or default in the performance of any of the agreements herein contained, or should conditions arise which make it advisable or necessary in the interest of the Government to cease work under this contract, the Government may terminate this contract by a notice in writing from the Contracting Officer to the Contractor.

This contract is authorized by the following law:

Public No. 703, 76th Congress, Approved July 2, 1940.

NEAL H. MCKAY,
Major, Quartermaster Corps,
Assistant to the Director
Purchases and Contracts.

[F. R. Doc. 40-5503; Filed, December 11, 1940; 9:48 a. m.]

[Contract No. W 6116 qm-1, O. I. No. 1-41]

SUMMARY OF COST-PLUS-A-FIXED-FEE
ARCHITECT-ENGINEER SERVICE

ARCHITECT-ENGINEER: HOLABIRD & ROOT, 333 NORTH MICHIGAN AVENUE, CHICAGO, ILLINOIS

Amount fixed fee: \$28,040.00.

Estimated cost of construction project: \$3,780,685.00.

Type of construction project: Construction of a Replacement and Recep-

tion Center, including necessary buildings, temporary structures, facilities, utilities and appurtenances thereto.

Location: Camp Grant, Rockford, Illinois.

Type of service: Architectural-Engineering.

The supplies and services to be obtained by this instrument are authorized by, are for the purpose set forth in, and are chargeable to, Procurement Authority No. QM 7913 PI-3211 A 0540.068-N the available balance of which is sufficient to cover the cost of same.

This Contract, entered into this 1st day of November 1940.

Description of the work. The Architect-Engineer shall perform all the necessary services provided under this contract for the following described project: The construction of a replacement and reception center, including necessary buildings at Camp Grant, Rockford, Illinois, and estimated to cost \$3,780,685.00.

Data to be furnished by the Government. The Government shall furnish the Architect-Engineer available schedules of preliminary data, layout sketches, and other information respecting sites, topography, soil conditions, outside utilities and equipment as may be essential for the preparation of preliminary sketches and the development of final drawings and specifications.

Fixed-fee and reimbursement of expenditures. In consideration for his undertakings under the contract, the Architect-Engineer shall be paid the following: A fixed fee in the amount of Twenty-Eight Thousand Forty Dollars (\$28,040.00) which shall constitute complete compensation for the Architect-Engineer's services.

Reimbursement for the following expenditures: The actual cost of expenditures made by the Architect-Engineer under the provisions of Article IV and Article VII of this contract, subject to the provisions of paragraph 1 b. (2) above.

Payments shall be made on vouchers approved by the Contracting Officer on standard forms, as soon as practicable after the submission of statements, with original certified payrolls, receipted bills for all expenses including materials, supplies and equipment, and all other supporting data and the amount of the Architect-Engineer's fixed fee earned.

All drawings, specifications, and blue prints are to become the property of the Government on completion of payments.

Changes in scope of project. The Contracting Officer may at any time, by a written order, make changes in the scope of the work contemplated by this contract.

Termination for cause or for convenience of the Government. The Government may terminate this contract at any time and for any cause by a notice in writing from the Contracting Officer to the Architect-Engineer.

This contract is authorized by the following laws:

Public No. 309—76th Congress, approved August 7, 1939.

Public No. 703—76th Congress, approved July 2, 1940.

NEAL H. MCKAY,
Major, Quartermaster Corps,
Assistant to the Director of
Purchases and Contracts.

[F. R. Doc. 40-5502; Filed, December 11, 1940;
9:48 a. m.]

NAVY DEPARTMENT.

[NOy-4530]

SUMMARY OF CONTRACT FOR CONSTRUCTION

CONTRACTORS: C. M. GUEST & SONS, BOX 196,
ANDERSON, SOUTH CAROLINA

DECEMBER 4, 1940.

On December 2, 1940, the Navy Department entered into a contract (NOy-4530) with C. M. Guest & Sons, Anderson, South Carolina, for the construction of a naval ammunition depot near Charleston, South Carolina, at an estimated total cost of \$1,000,000, including a fixed fee of \$45,000 payable to the Contractors.

The contract, among other things, further provides that the Navy Department may at any time make changes in approved drawings and/or specifications and, if such changes or additions to or omissions from the original project cause a material increase or decrease in the amount or character of the work to be done under the contract, or in the time required for its performance, an equitable adjustment in the amount of the fixed fee to be paid to the Contractors shall be made and the contract shall be modified accordingly. The contract also contains provisions for the termination of the contract by the Government and for an equitable settlement with the Contractors under the contract in the case of such termination.

B. MOREELL.

[F. R. Doc. 40-5505; Filed, December 11, 1940;
9:57 a. m.]

Bureau of Aeronautics.

[NOd-1618]

SUMMARY OF CONTRACT FOR PLANT FACILITIES AND EQUIPMENT

CONTRACTOR: UNITED AIRCRAFT CORPORATION
(PRATT & WHITNEY AIRCRAFT DIVISION)
EAST HARTFORD, CONN.

DECEMBER 5, 1940.

Under date of December 4, 1940, the Navy Department entered into a contract with United Aircraft Corporation (Pratt & Whitney Aircraft Division) for the acquisition, construction and installation of additional plant facilities and equip-

ment at the plant of that Corporation at East Hartford, Connecticut, at a total estimated cost of \$14,799,000.

The contract is in general accordance with the form of the Emergency Plant Facilities contract, approved by the Advisory Commission to the Council of National Defense and published in the FEDERAL REGISTER on October 19, 1940, as adapted by the Navy Department.

J. H. TOWERS,
Rear Admiral U. S. N.,
Chief of the Bureau of Aeronautics.

[F. R. Doc. 40-5501; Filed, December 11, 1940;
9:23 a. m.]

[NOd-1619]

SUMMARY OF CONTRACT FOR PLANT FACILITIES AND EQUIPMENT

CONTRACTOR: UNITED AIRCRAFT CORPORATION
(HAMILTON STANDARD PROPELLERS DIVISION), EAST HARTFORD, CONN.

DECEMBER 5, 1940.

Under date of December 4, 1940, the Navy Department entered into a contract with United Aircraft Corporation (Hamilton Standard Propellers Division) for the acquisition, construction and installation of additional plant facilities and equipment at the plant of that Corporation at East Hartford, Connecticut, and for additional machinery and equipment at its rented plant at Pawcatuck, Connecticut, at a total estimated cost of \$1,761,746.

The contract is in general accordance with the form of the Emergency Plant Facilities Contract, approved by the Advisory Commission to the Council of National Defense and published in the FEDERAL REGISTER on October 10, 1940, as adapted by the Navy Department.

J. H. TOWERS,
Rear Admiral, U. S. N.,
Chief of the Bureau of Aeronautics.

[F. R. Doc. 40-5493; Filed, December 11, 1940;
9:23 a. m.]

[NOd-1620]

SUMMARY OF CONTRACT FOR PLANT FACILITIES AND EQUIPMENT

CONTRACTOR: UNITED AIRCRAFT CORPORATION
(VOUGHT-SIKORSKY AIRCRAFT DIVISION) STRATFORD, CONN.

DECEMBER 5, 1940.

Under date of December 4, 1940, the Navy Department entered into a contract with United Aircraft Corporation (Vought-Sikorsky Aircraft Division) for the acquisition, construction and installation of additional plant facilities and equipment at the plant of that Corporation at Stratford, Connecticut, at a total estimated cost of \$1,600,000.

The contract is in general accordance with the form of the Emergency Plant

Facilities Contract, approved by the Advisory Commission to the Council of National Defense and published in the FEDERAL REGISTER on October 19, 1940, as adapted by the Navy Department.

J. H. TOWERS,
Rear Admiral U. S. N.,
Chief of the Bureau of Aeronautics.

[F. R. Doc. 40-5500; Filed, December 11, 1940;
9:28 a. m.]

DEPARTMENT OF THE INTERIOR.

Bituminous Coal Division.

[Docket No. A-396]

PETITION OF DISTRICT BOARD NO. 9 FOR THE ESTABLISHMENT OF PRICE CLASSIFICATIONS AND MINIMUM PRICES FOR THE COALS OF MINE INDEX NOS. 90, 91 AND 92 NOT HERETOFORE CLASSIFIED AND PRICED

NOTICE OF AND ORDER FOR HEARING AND ORDER GRANTING TEMPORARY RELIEF

A petition, pursuant to the Bituminous Coal Act of 1937, having been duly filed with this Division by the above-named party;

It is ordered, That the above-entitled matter in Docket A-396 be consolidated for hearing with the matter in Docket A-286 which has been set for hearing on January 22, 1941, and that under the applicable provisions of said Act and the rules of the Division the hearing be held on January 22, 1941, at ten o'clock in the forenoon of that day, at a hearing room of the Bituminous Coal Division, 734 Fifteenth Street NW., Washington, D. C. On such day the Chief of the Records Section in room 502 will advise as to the room where such hearing will be held.

It is further ordered, That Floyd McGown or any other officer or officers of the Division duly designated for that purpose shall preside at the hearing in such matter. The officers so designated to preside at such hearing are hereby authorized to conduct said hearing, to administer oaths and affirmations, examine witnesses, subpoena witnesses, compel their attendance, take evidence, require the production of any books, papers, correspondence, memoranda, or other records deemed relevant or material to the inquiry, to continue said hearing from time to time, and to prepare and submit to the Director proposed findings of fact and conclusions and the recommendation of an appropriate order in the premises, and to perform all other duties in connection therewith authorized by law.

Notice of such hearing is hereby given to all parties herein and to persons or entities having an interest in these proceedings and eligible to become a party herein. Any person desiring to be admitted as a party to this proceeding may

file a petition of intervention in accordance with the rules and regulations of the Bituminous Coal Division for proceedings instituted pursuant to section 4 II (d) of the Act, setting forth the facts on the basis of which the relief in the original petition is supported or opposed or on the basis of which other relief is sought. Such petitions of intervention shall be filed with the Bituminous Coal Division on or before January 16, 1941.

All persons are hereby notified that the hearing in the above-entitled matter and any orders entered therein, may concern, in addition to the matters specifically alleged in the petition, other matters necessarily incidental and related thereto, which may be raised by amendment to the petition, petitions of interveners or otherwise, or which may be necessary corollaries to the relief, if any, granted on the basis of this petition.

The matter concerned herewith is in regard to the petition of District Board No. 9 for the establishment of price classifications and minimum prices for the coals of Mine Index Nos. 90 (W. A. Bailey, Bailey Operation), 91 (Young & Young, Young Coal Company) and 92 (Clark & Elliot, Pine Ridge) which have not been heretofore classified and priced.

The petition also requests the establishment of price classifications and minimum prices for the coals of the Charleston Six Mine, Charleston Six Mining Company, Dawson Springs, Kentucky. The prices established for this mine in the Schedule of Effective Minimum Prices for District No. 9 For All Shipments Except Truck as Mine Index No. 11, M. B. Brown Mine, operated by Code Member M. B. Brown are still applicable to that mine, making consideration of the request in regard to this mine unnecessary here.

It is further ordered, That a reasonable showing of the necessity therefor having been made, pending final disposition of the petition in the above-entitled matter, temporary relief be, and it hereby is, granted as follows: commencing forthwith, the coals referred to in the schedule hereto annexed,¹ and made part hereof, shall be subject to the minimum prices therein provided.

Notice is hereby given that applications to stay, terminate or modify the temporary relief herein granted may be filed pursuant to the rules and regulations governing practice and procedure before the Bituminous Coal Division in proceedings instituted pursuant to section 4 II (d) of the Bituminous Coal Act of 1937.

Dated: December 8, 1940.

[SEAL]

H. A. GRAY,
Director.

[F. R. Doc. 40-5518; Filed, December 11, 1940;
11:26 a. m.]

¹ Filed as a part of the original document.

[Docket No. A-196]

PETITION OF TUBE CITY COLLIERIES, INC., FOR REDUCTION IN PRICE OF SIZE GROUP 10 (3/8" x 0 RAW SLACK) COAL PRODUCED AT ITS HUBBARD MINE (MINE INDEX No. 93) IN DISTRICT No. 2, FOR SHIPMENT INTO MARKET AREA 13, PURSUANT TO SECTION 4 II (d) OF THE BITUMINOUS COAL ACT OF 1937

NOTICE OF AND ORDER POSTPONING HEARING HERETOFORE SCHEDULED FOR DECEMBER 9, 1940

The original petitioner in the above entitled matter having shown reasonable cause why the hearing therein, heretofore set for December 9, 1940 by order of the Director dated November 26, 1940 should be postponed, and there having been no opposition thereto;

It is ordered, That the hearing in the above entitled Docket No. A-196 be postponed from December 9, 1940 until December 19, 1940 at 10 a. m. and be held at that date before Edward J. Hayes, or any other officer or officers of the Division duly designated to preside at said hearing, at a hearing room of the Bituminous Coal Division, 734 15th Street NW., Washington, D. C. On such day the Chief of the Records Section in room 502 will advise as to the room where such hearing will be held.

Dated: December 10, 1940.

[SEAL]

H. A. GRAY,
Director.

[F. R. Doc. 40-5522; Filed, December 11, 1940;
11:28 a. m.]

[Docket No. A-319]

PETITION OF DISTRICT BOARD NO. 16 FOR CHANGE IN SIZE GROUP DESCRIPTION FOR SIZE GROUP NO. 12 IN PRICE SCHEDULES FOR DISTRICT NO. 16

NOTICE OF AND ORDER FOR HEARING AND GRANTING TEMPORARY RELIEF

A petition, pursuant to the Bituminous Coal Act of 1937, having been duly filed with this Division by the above-named party;

It is ordered, That a hearing in the above-entitled matter under the applicable provisions of said Act and the rules of the Division be held on January 17, 1941, at 10 o'clock in the forenoon of that day, at a hearing room of the Bituminous Coal Division, 734 Fifteenth Street NW., Washington, D. C. On such day the Chief of the Records Section in room 502 will advise as to the room where such hearing will be held.

It is further ordered, That W. A. Cuff or any other officer or officers of the Division duly designated for that purpose shall preside at the hearing in such matter. The officers so designated to preside at such hearing are hereby authorized to conduct said hearing, to administer oaths and affirmations, examine witnesses, sub-

poena witnesses, compel their attendance, take evidence, require the production of any books, papers, correspondence, memoranda, or other records deemed relevant or material to the inquiry, to continue said hearing from time to time, and to prepare and submit to the Director proposed findings of fact and conclusions and the recommendation of an appropriate order in the premises, and to perform all other duties in connection therewith authorized by law.

Notice of such hearing is hereby given to all parties herein and to persons or entities having an interest in these proceedings and eligible to become a party herein. Any person desiring to be admitted as a party to this proceeding may file a petition of intervention in accordance with the rules and regulations of the Bituminous Coal Division for proceedings instituted pursuant to section 4 II (d) of the Act, setting forth the facts on the basis of which the relief in the original petition is supported or opposed or on the basis of which other relief is sought. Such petitions of intervention shall be filed with the Bituminous Coal Division on or before January 11, 1941.

All persons are hereby notified that the hearing in the above-entitled matter and any orders entered therein, may concern, in addition to the matters specifically alleged in the petition, other matters necessarily incidental and related thereto, which may be raised by amendment to the petition, petitions of interveners or otherwise, or which may be necessary corollaries to the relief, if any, granted on the basis of this petition.

The matter concerned herewith is in regard to revision of the size group description for Size Group No. 12 for District No. 16 so as to provide for a maximum screen opening of $\frac{3}{4}$ " x 0 in place of the maximum screen opening of $1\frac{1}{8}$ " x 0 for Size Group No. 12 appearing in Price Schedule No. 1 for District No. 16.

It is further ordered, That a reasonable showing of the necessity thereof having been made, pending final disposition of the petition in the above-entitled matter, temporary relief be and it is hereby granted as follows: Commencing forthwith, the maximum screen opening for Size Group No. 12 for District No. 16 shall be $\frac{3}{4}$ " x 0 in place of $1\frac{1}{8}$ " x 0 whenever reference is made to Size Group No. 12 on pages 5, 6, 8, and 9 in Price Schedule No. 1 for District No. 16.

Notice is hereby given that applications to stay, terminate or modify the temporary relief herein granted may be filed pursuant to the rules and regulations governing practice and procedure before the Bituminous Coal Division and proceedings instituted pursuant to section 4 II (d) of the Bituminous Coal Act of 1937.

Dated: December 10, 1940.

[SEAL]

H. A. GRAY,
Director.

[F. R. Doc. 40-5519; Filed, December 11, 1940; 11:27 a. m.]

[Docket No. A-339]

PETITION OF DAUGHERTY COAL COMPANY FOR REVISION OF CLASSIFICATIONS OF COAL OF ITS PINEY FORK MINE, DISTRICT NO. 2, WHEN SOLD FOR RAILROAD FUEL USE

NOTICE OF AND ORDER FOR HEARING

A petition, pursuant to the Bituminous Coal Act of 1937, having been duly filed with this Division by the above-named party;

It is ordered, That a hearing in the above-entitled matter under the applicable provisions of said Act and the rules of the Division be held on January 15, 1941, at 10 o'clock in the forenoon of that day, at a hearing room of the Bituminous Coal Division, 734 Fifteenth Street NW., Washington, D. C. On such day the Chief of the Records Section in room 502 will advise as to the room where such hearing will be held.

It is further ordered, That Charles O. Fowler or any other officer or officers of the Division duly designated for that purpose shall preside at the hearing in such matter. The officers so designated to preside at such hearing are hereby authorized to conduct said hearing, to administer oaths and affirmations, examine witnesses, subpoena witnesses, compel their attendance, take evidence, require the production of any books, papers, correspondence, memoranda, or other records deemed relevant or material to the inquiry, to continue said hearing from time to time, and to prepare and submit to the Director proposed findings of fact and conclusions and the recommendation of an appropriate order in the premises, and to perform all other duties in connection therewith authorized by law.

Notice of such hearing is hereby given to all parties herein and to persons or entities having an interest in these proceedings and eligible to become a party herein. Any person desiring to be admitted as a party to this proceeding may file a petition of intervention in accordance with the rules and regulations of the Bituminous Coal Division for proceedings instituted pursuant to section 4 II (d) of the Act, setting forth the facts on the basis of which the relief in the original petition is supported or opposed or on the basis of which other relief is sought. Such petitions of intervention shall be filed with the Bituminous Coal Division on or before January 10, 1941.

All persons are hereby notified that the hearing in the above-entitled matter and any orders entered therein, may concern, in addition to the matters specifically alleged in the petition, other matters, necessarily incidental and related thereto, which may be raised by amendment to the petition, petitions of interveners or otherwise, or which may be necessary corollaries to the relief, if any, granted on the basis of this petition.

The matter concerned herewith is in regard to petitioner's request for lower classifications for coal produced at its

Piney Fork Mine when sold for railroad fuel purposes. Petitioner contends its coal is erroneously classified with relation to the coal of certain other code members in District No. 2.

Dated: December 10, 1940.

[SEAL]

H. A. GRAY,
Director.

[F. R. Doc. 40-5521; Filed, December 11, 1940; 11:23 a. m.]

[Docket No. A-342]

PETITION OF CONSUMERS' COUNSEL DIVISION FOR A PERMANENT ORDER EQUALIZING MINIMUM PRICES FOR SHIPMENT ALL-RAIL AND AS LAKE CARGO FROM DISTRICTS 4, 7, AND 8 TO MARKET AREA 21

NOTICE OF AND ORDER FOR HEARING

A petition, pursuant to the Bituminous Coal Act of 1937, having been duly filed with this Division by the above-named party;

It is ordered, That a hearing in the above-entitled matter under the applicable provisions of said Act and the rules of the Division be held on January 9, 1941, at 10 o'clock in the forenoon of that day, at a hearing room of the Bituminous Coal Division, 734 Fifteenth Street NW., Washington, D. C. On such day the Chief of the Records Section in room 502 will advise as to the room where such hearing will be held.

It is further ordered, That W. A. Cuff or any other officer or officers of the Division duly designated for that purpose shall preside at the hearing in such matter. The officers so designated to preside at such hearing are hereby authorized to conduct said hearing, to administer oaths and affirmations, examine witnesses, subpoena witnesses, compel their attendance, take evidence, require the production of any books, papers, correspondence, memoranda, or other records deemed relevant or material to the inquiry, to continue said hearing from time to time, and to prepare and submit to the Director proposed findings of fact and conclusions and the recommendation of an appropriate order in the premises, and to perform all other duties in connection therewith authorized by law.

Notice of such hearing is hereby given to all parties herein and to persons or entities having an interest in these proceedings and eligible to become a party herein. Any person desiring to be admitted as a party to this proceeding may file a petition of intervention in accordance with the rules and regulations of the Bituminous Coal Division for proceedings instituted pursuant to section 4 II (d) of the Act, setting forth the facts on the basis of which the relief in the original petition is supported or opposed or on the basis of which other relief is sought. Such petitions of intervention shall be filed with the Bituminous Coal Division on or before January 4, 1941.

All persons are hereby notified that the hearing in the above-entitled matter and any orders entered therein, may concern, in addition to the matters specifically alleged in the petition, other matters necessarily incidental and related thereto, which may be raised by amendment to the petition, petitions of interveners or otherwise, or which may be necessary corollaries to the relief, if any, granted on the basis of this petition.

The matter concerned herewith is in regard to a petition of Consumers' Counsel Division asking that the minimum prices now applicable for shipment of prepared sizes all-rail from Districts 4, 7, and 8 to Market Area 21 be made equally applicable for shipment as lake cargo, both types of shipment to be subject to the same seasonal discounts; to wit, the maximum discount now established for all-rail shipment to be applicable for both methods of shipment from April 1 to July 1, 50 percent of the maximum discount to be permitted on shipments from July 1 to August 15 and no discount to be applicable for the remainder of the year.

Dated: December 10, 1940.

[SEAL] H. A. GRAY,
Director.

[F. R. Doc. 40-5516; Filed, December 11, 1940;
11:26 a. m.]

[Docket No. A-350]

PETITION OF WEST POINT MARION COAL COMPANY FOR MODIFICATION OF MINIMUM PRICES FOR COAL OF ITS MINE IN SUBDISTRICT NO. 3 OF DISTRICT NO. 2 FOR SALE TO THE ERIE RAILROAD

NOTICE OF AND ORDER FOR HEARING

A petition, pursuant to the Bituminous Coal Act of 1937, having been duly filed with this Division by the above-named party;

It is ordered, That a hearing in the above-entitled matter under the applicable provisions of said Act and the rules of the Division be held on January 14, 1941, at 10 o'clock in the forenoon of that day, at a hearing room of the Bituminous Coal Division, 734 Fifteenth Street NW., Washington, D. C. On such day the Chief of the Records Section in room 502 will advise as to the room where such hearing will be held.

It is further ordered, That Travis Williams or any other officer or officers of the Division duly designated for that purpose shall preside at the hearing in such matter. The officers so designated to preside at such hearing are hereby authorized to conduct said hearing, to administer oaths and affirmations, examine witnesses, subpoena witnesses, compel their attendance, take evidence, require the production of any books, papers, correspondence, memoranda, or other records deemed relevant or material to the inquiry, to continue said hearing from time to time, and to prepare and submit to the Director proposed findings of fact and conclusions

and the recommendation of an appropriate order in the premises, and to perform all other duties in connection therewith authorized by law.

Notice of such hearing is hereby given to all parties herein and to persons or entities having an interest in these proceedings and eligible to become a party herein. Any person desiring to be admitted as a party to this proceeding may file a petition of intervention in accordance with the rules and regulations of the Bituminous Coal Division for proceedings instituted pursuant to section 4 II (d) of the Act, setting forth the facts on the basis of which the relief in the original petition is supported or opposed or on the basis of which other relief is sought. Such petitions of intervention shall be filed with the Bituminous Coal Division on or before January 9, 1941.

All persons are hereby notified that the hearing in the above-entitled matter and any orders entered therein, may concern, in addition to the matters specifically alleged in the petition, other matters necessarily incidental and related thereto, which may be raised by amendment to the petition, petitions of interveners or otherwise, or which may be necessary corollaries to the relief, if any, granted on the basis of this petition.

The matter concerned herewith is in regard to petitioner's request that its competitors for the sale of coal to the Erie Railroad not be permitted to deduct 15¢ per ton from mine price for such coal. The competitive coals are produced in District No. 3.

Dated: December 10, 1940.

[SEAL] H. A. GRAY,
Director.

[F. R. Doc. 40-5520; Filed, December 11, 1940;
11:27 a. m.]

[Docket No. A-352]

PETITION OF CONSUMERS' COUNSEL FOR FREE ALONGSIDE PRICES FROM DISTRICTS 8, 9, AND 10 FOR THE OLD QUAKER COMPANY, LAWRENCEBURG, INDIANA

NOTICE OF AND ORDER FOR HEARING

A petition, pursuant to the Bituminous Coal Act of 1937, having been duly filed with this Division by the above-named party;

It is ordered, That a hearing in the above-entitled matter under the applicable provisions of said Act and the rules of the Division be held on January 9, 1941, at 10 o'clock in the forenoon of that day, at a hearing room of the Bituminous Coal Division, 734 Fifteenth Street NW., Washington, D. C. On such day the Chief of the Records Section in room 502 will advise as to the room where such hearing will be held.

It is further ordered, That Charles S. Mitchell or any other officer or officers of the Division duly designated for that purpose shall preside at the hearing in such matter. The officers so designated to preside at such hearing are hereby

authorized to conduct said hearing, to administer oaths and affirmations, examine witnesses, subpoena witnesses, compel their attendance, take evidence, require the production of any books, papers, correspondence, memoranda, or other records deemed relevant or material to the inquiry, to continue said hearing from time to time, and to prepare and submit to the Director proposed findings of fact and conclusions and the recommendation of an appropriate order in the premises, and to perform all other duties in connection therewith authorized by law.

Notice of such hearing is hereby given to all parties herein and to persons or entities having an interest in these proceedings and eligible to become a party herein. Any person desiring to be admitted as a party to this proceeding may file a petition of intervention in accordance with the rules and regulations of the Bituminous Coal Division for proceedings instituted pursuant to section 4 II (d) of the Act, setting forth the facts on the basis of which the relief in the original petition is supported or opposed or on the basis of which other relief is sought. Such petitions of intervention shall be filed with the Bituminous Coal Division on or before January 4, 1941.

All persons are hereby notified that the hearing in the above-entitled matter and any orders entered therein, may concern, in addition to the matters specifically alleged in the petition, other matters necessarily incidental and related thereto, which may be raised by amendment to the petition, petitions of interveners or otherwise, or which may be necessary corollaries to the relief, if any, granted on the basis of this petition.

The matter concerned herewith is in regard to the request of Consumers' Counsel that the Old Quaker Company at Lawrenceburg, Indiana, be given the right to purchase coal moving by river from Districts 8, 9, and 10 at the prices set out in the various price schedules for free alongside delivery, rather than at the prices for ex-river delivery.

Dated December 10, 1940.

[SEAL] H. A. GRAY,
Director.

[F. R. Doc. 40-5523; Filed, December 11, 1940;
11:27 a. m.]

[Docket No. A-355]

PETITION OF CONSUMERS MINING CORPORATION, A CODE MEMBER IN DISTRICT 8, FOR A RECLASSIFICATION OF ITS COALS FROM LOW VOLATILE TO HIGH VOLATILE, PURSUANT TO SECTION 4 II (d) OF THE BITUMINOUS COAL ACT OF 1937

MEMORANDUM AND ORDER CONCERNING TEMPORARY RELIEF

Petitioner, a code member in District 8, requested that coal from its Premier mine be reduced in classification in Size Group 4 from "A" to "C", that petitioner be permitted to sell its 1' x 2½" coal

at the Size Group 4 price and its 1" x 1/4" coal at the Size Group 5 price, and that the price for its railroad fuel on-line screenings larger than 1 1/2" x 0 but not exceeding 2 1/2" x 0 be reduced from \$2.20 to \$1.90. Petitioner requested that temporary relief be granted pending the final disposition of the petition.

An informal conference was held on December 3, 1940, on the question of temporary relief. Representatives of petitioner, District Board 8, and Raven Red Ash Coal Company, a producer in District 8, were present. Petitioner contended that it had not been able to move its coal in Size Groups 3 and 4 in any appreciable quantities and that it had not been able to sell coal for use as railroad fuel. District Board 8 supported the request of petitioner.

Raven Red Ash Coal Company opposed the request for temporary relief, representing that the quality of its coal was identical with that of petitioner, that it had been given the same minimum prices as petitioner, and that it had been able to market its coal since the establishment of minimum prices. The representative of Raven Red Ash Coal Company attributed the failure of petitioner to market its coal satisfactorily to the fact that petitioner did not make standard sizes of coal and did not screen its coal properly. He further stated that Raven Red Ash would be seriously prejudiced by the granting of a reduction in price to petitioner.

On the basis of the views expressed and data submitted at the informal conference, the Director finds that the petitioner has made no adequate showing of actual or impending injury in the event that temporary relief is not granted, that the granting of temporary relief might unduly prejudice other interested persons in advance of a hearing, and that no sufficiently clear showing has been made that petitioner is entitled to the relief sought.

Now, therefore, it is ordered, That the petition for temporary relief is denied.

Dated: December 10, 1940.

[SEAL]

H. A. GRAY,
Director.

[F. R. Doc. 40-5524; Filed, December 11, 1940; 11:29 a. m.]

[Docket Nos. A-370, A-248, A-332, A-194, A-209, A-210, A-211, A-212, A-213, A-214, A-215, A-216, A-217, A-218, A-219, A-220, A-292, A-293, A-294, A-311, A-344, A-395]

PETITION OF DISTRICT BOARD 10 FOR ESTABLISHMENT OF PRICE CLASSIFICATIONS AND MINIMUM PRICES FOR RAIL SHIPMENT OF COALS OF CERTAIN MINES HERETOFORE CLASSIFIED AND PRICED ONLY FOR TRUCK SHIPMENTS; PETITION OF DISTRICT BOARD 10 FOR THE ESTABLISHMENT OF PRICE CLASSIFICATIONS AND MINIMUM PRICES FOR THE COALS OF CERTAIN MINES IN DISTRICT 10 NOT HERETOFORE CLASSIFIED AND PRICED; PETITION OF BLACK EAGLE COAL COMPANY FOR THE ESTABLISHMENT

OF PRICES FOR SHIPMENT BY RAILROAD FROM MINE INDEX 654 (BLACK EAGLE COAL COMPANY), DISTRICT 10; PETITION OF LITTLE COAL COMPANY FOR THE ESTABLISHMENT OF PRICES FOR SHIPMENT BY RAILROAD FROM MINE INDEX 600 (LITTLE COAL COMPANY), DISTRICT 10; PETITIONS OF MITCHELL COAL COMPANY, BLACK BANNER COAL COMPANY, HOWERTON COAL COMPANY, WALNUT VALLEY COAL COMPANY, WILLOW SPRINGS COAL COMPANY, CARRIER MILLS COAL COMPANY, VALLIE CORDER, STEEL TIPPLE COAL COMPANY, MONROE MOORE & SON, CHERRY HILL MINE, NEW SPILLERTON COAL COMPANY, CEDAR HILL COAL COMPANY, A. E. STROBEL, OGMORE COAL COMPANY, MOREN COAL COMPANY, SIMS COAL COMPANY, FRED H. WILLS, AND SQUARE DEAL COAL COMPANY, PRODUCERS IN DISTRICT 10, FOR THE REVISION OF MINIMUM PRICES ESTABLISHED FOR THEIR MINES

NOTICE OF AND ORDER FOR HEARING

Original petitions, pursuant to the Bituminous Coal Act of 1937, having been duly filed with this Division by the above-named parties; and

The matter in Docket A-248 having been set for hearing on December 6, 1940, and the original petitioner in Docket A-248 having shown reasonable cause why the hearing in that matter should be postponed and should be consolidated for hearing with the other above-entitled matters at Springfield, Illinois;

It is ordered, That the hearing in Docket A-248 be postponed, that all of the above-entitled matters be consolidated for hearing, and that the hearing be held on December 20, 1940, at 10 o'clock in the forenoon of that day, at a hearing room of the Bituminous Coal Division, Abraham Lincoln Hotel, Springfield, Illinois, under the applicable provisions of the Act and the rules of the Division.

It is further ordered, That Thurlow G. Lewis or any other officer or officers of the Division duly designated for that purpose shall preside at the hearing in such matters. The officers so designated to preside at such hearing are hereby authorized to conduct said hearing, to administer oaths and affirmations, examine witnesses, subpoena witnesses, compel their attendance, take evidence, require the production of any books, papers, correspondence, memoranda, or other records deemed relevant or material to the inquiry, to continue said hearing from time to time, and to prepare and submit to the Director proposed findings of fact and conclusions and the recommendation of an appropriate order in the premises, and to perform all other duties in connection therewith authorized by law.

Notice of such hearing is herein given to all parties herein and to persons or entities having an interest in these proceedings and eligible to become a party herein. Any person desiring to be admitted as a party to this proceeding may

file a petition of intervention in accordance with the rules and regulations of the Bituminous Coal Division for proceedings instituted pursuant to section 4 II (d) of the Act, setting forth the facts on the basis of which the relief in the original petitions is supported or opposed or on the basis of which other relief is sought. Such petitions of intervention shall be filed with the Bituminous Coal Division on or before December 14, 1940.

All persons are hereby notified that the hearing in the above-entitled matters and any orders entered therein, may concern, in addition to the matters specifically alleged in the petition, other matters necessarily incidental and related thereto, which may be raised by amendment to the petition, petitions of interveners or otherwise, or which may be necessary corollaries to the relief, if any, granted on the basis of this petition.

The matters concerned herewith are in regard to the following:

Docket No. A-370, the petition of District Board 10 for the establishment of price classifications and minimum prices for shipment by rail of the coals of Black Eagle Coal Company, D. & D. Coal Company, Little Coal Company, Peaco Coal Company, Pekin Coal Mining Company, Rawalt Coal Company, Sunnyside Coal Company, and Thermal Coal Company heretofore classified and priced only for shipment by truck;

Docket No. A-248, the petition of District Board 10 praying for the establishment of price classifications and minimum prices for the coals of certain mines located in District 10, named in the Notice of and Order for Hearing of the Director dated November 6, 1940, for which coals price classifications and minimum prices have not heretofore been established.

Docket No. A-332, the petition of Black Eagle Coal Company for the establishment of price classifications and minimum prices for shipment by rail of the coals of Mine Index 654, District 10, heretofore classified and priced only for shipment by truck;

Docket No. A-194, the petition of Little Coal Company for the establishment of price classifications and minimum prices for shipment by rail of the coals of Mine Index 600, District 10, heretofore classified and priced only for shipment by truck;

Docket Nos. A-209, A-210, A-211, A-212, A-213, A-214, A-215, A-216, A-217, A-218, A-219, A-220, A-292, A-293, A-294, A-311, A-344 and A-395, petitions of Mitchell Coal Company (A-209), Black Banner Coal Company (A-210), Howerton Coal Company (A-211), Walnut Valley Coal Company (A-212), Willow Springs Coal Company (A-213), Carrier Mills Coal Company (A-214), Vallie Corder (A-215), Steel Tipple Coal Company (A-216), Monroe Moore & Son (A-217), Cherry Hill Mine (A-218), New Spillerton Coal Company (A-219), Cedar Hill Coal Company (A-220), A. E. Strobel (A-292), Ogmores Coal Company (A-293), Moren Coal

Company (A-294), Sims Coal Company (A-311), Fred H. Wills (A-344) and Square Deal Coal Company (A-395) requesting revision of the minimum prices established for their respective mines.

Dated: December 10, 1940.

[SEAL] H. A. GRAY,
Director.

[F. R. Doc. 40-5517; Filed, December 11, 1940;
11:26 a. m.]

FEDERAL COMMUNICATIONS COMMISSION.

[Docket No. 5957]

APPLICATION OF HAVENS & MARTIN, INC.
(WMBG)

NOTICE OF HEARING

Application dated June 24, 1940; for modification of license; class of service, broadcast; class of station, broadcast; location, Richmond, Virginia; operating assignment specified: Frequency, 1350 kc.; power, 5 kw. night, 5 kw. day (directional antenna); hours of operation, unlimited.

You are hereby notified that the Commission has examined the above described application and has designated the matter for hearing for the following reasons:

1. To determine whether the granting of this application would be consistent with the Standards of Good Engineering Practice.
2. To determine whether the granting of this application would tend toward a fair, efficient and equitable distribution of radio service as contemplated by Section 307 (b) of the Communications Act of 1934, as amended.
3. To determine the nature and extent of any interference which would result to the service area of Station CKPC, Brantford, Ontario, should Station WMBG operate as proposed simultaneously with Station CKPC after completion of the changes in allocation proposed by the United States and Canada pursuant to the North American Regional Broadcasting Agreement.
4. To determine whether the granting of the instant application would be consistent with the provisions of the North American Regional Broadcasting Agreement and the notices promulgated thereunder by the United States and Canada.
5. To determine the nature and extent of any interference which would result from the granting of the application of Station WMBG and the application of WTSP (B3-P-2933).
6. To determine the area and population now served by Station WMBG, and to be served by it, if operated as proposed.

The application involved herein will not be granted by the Commission unless the issues listed above are determined in favor of the applicant on the basis

of a record duly and properly made by means of a formal hearing.

The applicant is hereby given the opportunity to obtain a hearing on such issues by filing a written appearance in accordance with the provisions of Section 1.382 (b) of the Commission's Rules of Practice and Procedure. Persons other than the applicant who desire to be heard must file a petition to intervene in accordance with the provisions of Section 1.102 of the Commission's Rules of Practice and Procedure.

The applicant's address is as follows:

Havens & Martin, Inc.,
Radio Station WMBG,
3301 West Broad Street,
Richmond, Virginia.

Dated December 7, 1940.
By the Commission.

[SEAL] T. J. SLOWIE,
Secretary.

[F. R. Doc. 40-5508; Filed, December 11, 1940;
9:57 a. m.]

[Docket No. 5963]

APPLICATION OF FOULKROD RADIO ENGINEERING Co. (WTEL)

NOTICE OF HEARING

Application dated October 11, 1939; for construction permit; class of service, broadcast; class of station, broadcast; location, Philadelphia, Pa.; operating assignment specified: Frequency, 1500 kc.; power, 250 w. night, 250 w. day; hours of operation, unlimited.

You are hereby notified that the Commission has examined the above described application and has designated the matter for hearing for the following reasons:

1. To determine whether the granting of the application would be consistent with the Standards of Good Engineering Practice.
2. To determine whether the granting of this application would tend toward a fair, efficient, and equitable distribution of radio service as contemplated by section 307 (b) of the Communications Act of 1934, as amended.
3. To determine the nature and extent of any interference which would result to the service areas of Stations WTEL and WGAL, should Station WTEL operate as proposed, simultaneously with WGAL.
4. To determine the nature and extent of any interference which would result to the service areas of Station WTEL and the proposed Station of South Jersey Broadcasting Company (B1-P-2633), at Vineland, New Jersey, from the granting of the instant application and the application of South Jersey Broadcasting Company.
5. To determine the area and population now served by Station WTEL and to be served by said station, if operated as proposed.

6. To determine whether the equipment proposed will comply in all respects with the Commission's Rules and Regulations and especially §§ 3.46 and 3.55.

The application involved herein will not be granted by the Commission unless the issues listed above are determined in favor of the applicant on the basis of a record duly and properly made by means of a formal hearing.

The applicant is hereby given the opportunity to obtain a hearing on such issues by filing a written appearance in accordance with the provisions of § 1.382 (b) of the Commission's Rules of Practice and Procedure. Persons other than the applicant who desire to be heard must file a petition to intervene in accordance with the provisions of Section 1.102 of the Commission's Rules of Practice and Procedure.

The applicant's address is as follows:

Foulkrod Radio Engineering Company,
Radio Station WTEL,
WTEL Building,
4312-14 N. Broad Street,
Philadelphia, Pa.

December 7, 1940.
By the Commission.

[SEAL] T. J. SLOWIE,
Secretary.

[F. R. Doc. 40-5507; Filed, December 11, 1940;
9:57 a. m.]

SECURITIES AND EXCHANGE COMMISSION.

[File No. 2-4266]

IN THE MATTER OF MARQUETTE MINES, INC.

ORDER CONSENTING TO WITHDRAWAL OF REGISTRATION STATEMENT AND DISMISSING STOP ORDER PROCEEDING

At a regular session of the Securities and Exchange Commission, held at its office in the City of Washington, D. C., on the 9th day of December, A. D. 1940.

A proceeding having been instituted pursuant to section 8 (d) of the Securities Act 1933 by the Commission on the registration statement of Marquette Mines, Inc., a Michigan corporation, after confirmed telegraphic notice by the Commission to the registrant that it appears that said registration statement includes untrue statements of material facts and omits to state material facts required to be stated therein and material facts necessary to make the statements therein not misleading; and

The registrant having applied to the Commission for consent to withdraw said registration statement; and

The Commission having duly considered the matter in its Findings and Opinion issued on November 14, 1940, wherein it stated that such withdrawal would be consistent with the public interest and the protection of investors on specified conditions therein set forth, and further

stated that upon compliance with such conditions the said application would be granted and this proceeding would be dismissed; and

It appearing that the registrant has fully complied with the aforesaid conditions; and

The Commission being now fully advised in the premises;

It is ordered, Pursuant to Rule 960 of the General Rules and Regulations promulgated under section 19 (a) of the Securities Act of 1933, that said application be and the same hereby is granted; and

It is further ordered, That the proceeding herein be and the same hereby is dismissed.

By the Commission.

[SEAL] ORVAL L. DUBOIS,
Recording Secretary.

[F. R. Doc. 40-5512; Filed, December 11, 1940; 11:10 a. m.]

[File No. 70-71]

IN THE MATTER OF HUDSON RIVER POWER CORPORATION SYSTEM PROPERTIES, INC. AND INTERNATIONAL HYDRO-ELECTRIC SYSTEM

ORDER DENYING APPLICATIONS

At a regular session of the Securities and Exchange Commission, held at its office in the City of Washington, D. C., on the 9th day of December, A. D. 1940.

International Hydro-Electric System, a registered holding company, and its subsidiaries, Hudson River Power Corporation and System Properties, Inc., having filed joint declarations and applications and amendments thereto, under sections 6 (b), 7, and 10 of the Public Utility Holding Company Act of 1935, under various Rules of the Commission promulgated pursuant to section 12 of the said Act, and under Instruction 8 (c) of the Uniform System of Accounts for Public Utility Holding Companies, which declarations and applications relate to the acquisition by Hudson River Power Corporation of all of the assets and the assumption of all of the liabilities of System Properties, Inc., the refunding, following such acquisition, of the publicly held debt of the said companies, and various other transactions referred to in the Findings and Opinion of the Commission in this matter; and

A hearing on said declarations and applications having been held after appropriate notice, briefs having been filed, the Commission having heard argument and examined the record in this proceeding, and having this day issued its Findings and Opinion in the matter; and

The Commission being unable to find that the proposed acquisition of the assets of System Properties, Inc., by Hud-

son River Power Corporation will serve the public interest by tending towards the economical and efficient development of an integrated public utility system within the meaning of section 10 (c) (2) of the Act, and finding that the application for approval of such acquisition must therefore be denied, and further finding that all of the transactions covered by the remaining applications and declarations are based on the consummation of such acquisition and cannot be effected unless such acquisition is approved;

It is ordered, That all of the applications herein are denied and that all of the declarations herein are not permitted to become effective.

By the Commission.

[SEAL] ORVAL L. DUBOIS,
Recording Secretary.

[F. R. Doc. 40-5513; Filed, December 11, 1940; 11:11 a. m.]

[File No. 70-209]

IN THE MATTER OF COLUMBIA GAS & ELECTRIC CORPORATION, MANUFACTURERS GAS COMPANY

NOTICE REGARDING FILING

At a regular session of the Securities and Exchange Commission, held at its office in the City of Washington, D. C., on the 10th day of December, A. D. 1940.

Notice is hereby given that a declaration or application (or both), has been filed with this Commission pursuant to the Public Utility Holding Company Act of 1935 by the above named party or parties; and

Notice is further given that any interested person may, not later than December 26, 1940 at 4:30 P. M., E. S. T., or 1:00 P. M., E. S. T., if such date be a Saturday, request the Commission in writing that a hearing be held on such matter, stating the reasons for such request and the nature of his interest, or may request that he be notified if the Commission should order a hearing thereon. At any time thereafter such declaration or application, as filed or as amended, may become effective or may be granted, as provided in Rule U-8 of the Rules and Regulations promulgated pursuant to said Act. Any such request should be addressed: Secretary, Securities and Exchange Commission, Washington, D. C.

All interested persons are referred to said declaration or application, which is on file in the office of said Commission, for a statement of the transactions therein proposed, which are summarized below:

Manufacturers Gas Company, a subsidiary of Columbia Gas & Electric Corporation, a registered holding company, proposes to issue and sell to said Columbia Gas & Electric Corporation a maxi-

mum of \$120,000 principal amount of unsecured notes bearing an interest rate of 3% and maturing eleven months after their respective dates of issuance. The funds realized from the sale of these notes will be used by Manufacturers Gas Company to enlarge its production and transmission facilities in the Kane gas field. The proposed transaction is designed to provide interim financing for the program above described pending a proposed consolidation of The Manufacturers Light and Heat Company, Manufacturers Gas Company, Pennsylvania Fuel Supply Company and Greensboro Gas Company into a new corporation to be known as The Manufacturers Light and Heat Company, and the proposed issuance of certain thirty-year 4½% notes by the new corporation. The program contemplates payment and retirement of the presently proposed eleven months' notes through the issuance and sale of the 4½% 30-year notes of the new corporation above mentioned.

Applicants and declarants have designated sections 6 (b), 9 (a) and 10 of the Public Utility Holding Company Act of 1935 as applicable to the proposed transaction.

By the Commission.

[SEAL] ORVAL L. DUBOIS,
Recording Secretary.

[F. R. Doc. 40-5515; Filed, December 11, 1940; 11:11 a. m.]

IN THE MATTER OF A PROCEEDING BEFORE THE SECURITIES AND EXCHANGE COMMISSION TO DETERMINE WHETHER JOSEPH L. MERRILL SHOULD BE SUSPENDED OR EXPELLED FROM MEMBERSHIP ON CERTAIN NATIONAL SECURITIES EXCHANGES¹

ORDER AMENDING ORDER TO SHOW CAUSE AND FOR HEARING, DESIGNATING OFFICER, TIME AND PLACE FOR TAKING TESTIMONY

At a regular session of the Securities and Exchange Commission held at its office in the City of Washington, D. C., on the 10th day of December 1940.

It is ordered, That the order to show cause and for hearing in the above-entitled matter, adopted by the Commission on October 16, 1940, as amended on October 31, and November 25, 1940, be and the same is hereby further amended to postpone the hearing from 10 A. M. on December 11, 1940, until 10 A. M. on December 23, 1940, at the New York Regional Office of the Securities and Exchange Commission, 120 Broadway, New York, New York.

By the Commission.

[SEAL] ORVAL L. DUBOIS,
Recording Secretary.

[F. R. Doc. 40-5514; Filed, December 11, 1940; 11:11 a. m.]

¹ Pursuant to Section 19 (a) (3) of the Securities Exchange Act of 1934.

