

HISTORIC AMERICAN ENGINEERING RECORD

INDEX TO PHOTOGRAPHS

HAER
COLO
30-GOLD.V
1M-

ROCKY FLATS PLANT, PLUTONIUM MANUFACTURING ^{FACILITY} HAER No. CO-83-M
(Rocky Flats Plant, Building 707)
Located in the north-central section of the Plant, within the Protected Area, just south of
Building 776/777.
Golden Vicinity
Jefferson County
Colorado

Photographs CO-83-M-1 through CO-83-M-20 were taken by various site photography contractors, dates are indicated in parentheses.

- CO-83-M-1 VIEW OF THE CONTROL ROOM FOR THE X-Y RETRIEVER. USING THE X-Y RETRIEVER, OPERATORS RETRIEVED PLUTONIUM METAL FROM THE PLUTONIUM STORAGE VAULTS (IN MODULE K) AND CONVEYED IT TO THE X-Y SHUTTLE AREA WHERE IT WAS CUT AND WEIGHED. FROM THE SHUTTLE AREA THE PLUTONIUM WAS CONVEYED TO MODULES A, J OR K FOR CASTING, OR MODULE B FOR ROLLING AND FORMING. (5/17/71)
- CO-83-M-2 VIEW OF INTERIOR OF X-Y RETRIEVER. THE X-Y RETRIEVER WAS HOUSED IN MODULE K AND WAS USED TO SORT AND RETRIEVE PLUTONIUM METAL FROM A STORAGE VAULT FOR DISTRIBUTION TO OTHER PROCESSES IN BUILDING 707. (11/29/88)
- CO-83-M-3 VIEW OF CHAINVEYOR. AN ENCLOSED CHAIN CONVEYOR CONNECTED GLOVE BOXES WITHIN AND BETWEEN MODULAR WORK AREAS. LEADED GLOVES WERE AFFIXED TO PORTS ALONG THE CHAINVEYOR PATHWAY TO ALLOW OPERATOR ACCESS. (1/25/93)
- CO-83-M-4 VIEW OF PLUTONIUM CANISTER ON CHAINVEYOR. SCRAP PLUTONIUM WAS COLLECTED INTO CANS AT INDIVIDUAL WORKSTATIONS. THE CANS WERE TRANSFERRED VIA THE CHAIN CONVEYOR TO A WORKSTATION IN MODULE C WHERE THE MATERIAL WAS COMPRESSED INTO BRIQUETTES FOR LATER USE. (6/20/93)

ROCKY FLATS PLANT, PLUTONIUM MANUFACTURING FACILITY
HAER No. CO-83-M
INDEX TO PHOTOGRAPHS
(Page 2)

- CO-83-M-5 VIEW OF A GLOVE BOX FIREWALL DETAIL. THE FIREWALL WAS A SAFETY FEATURE TO PREVENT THE SPREAD OF FIRE BETWEEN INTERCONNECTED GLOVE BOXES. PLUTONIUM IS PYROPHORIC, AND MAY IGNITE IN THE PRESENCE OF OXYGEN: (5/8/70)
- CO-83-M-6 VIEW OF BUILDING 707 INTERIOR. GLOVE BOX WORKSTATIONS ARE BEING CONSTRUCTED FOR FOUNDRY PROCESSES IN MODULE A. (10/6/69)
- CO-83-M-7 VIEW OF THE INTERIOR OF MODULE A, ONE OF THE THREE PLUTONIUM FOUNDRY MODULES. ALTHOUGH CASTING FURNACES WERE PRESENT IN THE MODULE, IT WAS USED PRIMARILY FOR SAMPLING CAST PLUTONIUM. (11/6/73)
- CO-83-M-8 VIEW OF FOUNDRY INDUCTION FURNACES, MODULE J. THE FOUNDRY CASTING PROCESS WAS CONDUCTED IN A VACUUM. PLUTONIUM METAL WAS MELTED IN ONE OF FOUR ELECTRIC INDUCTION FURNACES TO FORM INGOTS.
- CO-83-M-9 VIEW OF BAG-IN BAG-OUT PORT IN MODULE J, ASSOCIATED WITH PLUTONIUM CASTING PROCESSES. (2/98)
- CO-83-M-10 VIEW OF MODULE B, INSTALLATION OF A HYDRAULIC PRESS. THE PRESS WILL EVENTUALLY BE CONNECTED TO A GLOVE BOX LINE. (9/29/69)
- CO-83-M-11 DETAIL VIEW OF A LATHE IN MODULE C. THE LATHE WAS USED FOR FINAL MACHINING OF TRIGGER COMPONENTS. LATHE TURNINGS WERE COLLECTED FROM THE BACK OF THE LATH FOR DISPOSAL. (2/22/84)
- CO-83-M-12 VIEW OF THE INSPECTION MODULE (MODULE D). THE GLOVE BOX IN THE FOREFRONT OF THE PHOTOGRAPH CONTAINS A DRILL PRESS; OTHER GLOVE BOXES ARE USED FOR PARTS INSPECTION. (5/70)
- CO-83-M-13 VIEW OF VACUUM CHAMBER AND WELDING EQUIPMENT IN MODULE E. PARTS WERE WELDED UNDER A VACUUM TO PREVENT CORROSION. (11/6/73)

ROCKY FLATS PLANT, PLUTONIUM MANUFACTURING FACILITY
HAER No. CO-83-M
INDEX TO PHOTOGRAPHS
(Page 3)

- CO-83-M-14 VIEW OF DOWNDRAFT TABLES IN THE SUPER DRY ROOM OF MODULE F. AIR IS DRAWN TOWARD THE DOWNDRAFT TABLE, THROUGH THE MESH-SCREEN WORK SURFACE, AND OUT OF THE BUILDING THROUGH A BANK OF FILTERS. AT THE DOWNDRAFT TABLE, UNCOATED PLUTONIUM PARTS AND OTHER PARTS FROM PREVIOUS GLOVE BOX OPERATIONS WERE ASSEMBLED INTO UNITS THAT COULD BE SAFELY TRANSPORTED, PROCESSED, AND STORED OUTSIDE THE PROTECTION OF A GLOVE BOX. (11/6/73)
- CO-83-M-15 VIEW OF MODULE H, THE HIGH PRESSURE ASSEMBLY AREA. PROCESSES IN THIS MODULE OCCURRED UNDER HIGH PRESSURES AND TEMPERATURES. (5/70)
- CO-83-M-16 VIEW OF THE STATIONARY OPERATING ENGINEER CONTROL PANEL INSTALLATION. THE PANEL CONTROLS AIR-HANDLING EQUIPMENT AND AIR PRESSURE WITHIN THE BUILDING. (10/6/69)
- CO-83-M-17 VIEW OF AIR LOCK ENTRY DOOR. BANKS OF AIR FILTERS ARE VISIBLE TO THE SIDES OF THE DOORS. THE BUILDING WAS DIVIDED INTO ZONES BY AIRLOCK DOORS AND AIR FILTERS. AIR PRESSURE DIFFERENTIALS WERE MAINTAINED IN THE ZONES, SUCH THAT AIRFLOW WAS PROGRESSIVELY TOWARD AREAS WITH THE HIGHEST POTENTIAL FOR CONTAMINATION. (9/24/91)
- CO-83-M-18 VIEW OF THE SECOND FLOOR OF BUILDING 707. AIR EXHAUST FANS ARE USED TO MAINTAIN PRESSURE DIFFERENTIALS WITHIN THE BUILDING. (5/70)
- CO-83-M-19 VIEW OF SECOND FLOOR, SOUTHERN PORTION OF BUILDING 707. THE STORAGE TANKS CONTAIN MACHINE COOLANTS AND SOLVENTS USED IN FABRICATION PROCESSES. (5/70)
- CO-83-M-20 VIEW OF LOW PRESSURE PUMPING EQUIPMENT ON THE SECOND FLOOR OF BUILDING 707. THE EQUIPMENT MAINTAINS PROPER COOLANT PRESSURE IN MACHINES. (5/70)