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THE DEPARTMENT OF ENERGY'S ROCKY FLATS PLANT: A GUIDE TO RECORD SERIES USEFUL FOR HEALTH-RELATED RESEARCH

VOLUME IV

PRODUCTION AND MATERIALS HANDLING

August 1, 1995



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THE DEPARTMENT OF ENERGY'S ROCKY FLATS PLANT: A GUIDE TO RECORD SERIES USEFUL FOR HEALTH-RELATED RESEARCH

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

INTRODUCTION

Overview

This is the fourth in a series of seven volumes which constitute a guide to records of the Rocky Flats Plant useful for conducting health-related research. The primary purpose of Volume IV is to describe record series pertaining to production and materials handling activities at the Department of Energy's (DOE) Rocky Flats Plant, now named the Rocky Flats Environmental Technology Site, near Denver, Colorado. History Associates Incorporated (HAI) prepared this guide as part of its work as the support services contractor for DOE's Epidemiologic Records Inventory Project.

This introduction briefly describes the Epidemiologic Records Inventory Project and HAI's role in the project, provides a history of production and materials handling practices at Rocky Flats, and identifies organizations contributing to production and materials handling policies and activities. Other topics include the scope and arrangement of the guide and the organization to contact for access to these records. Comprehensive introductory and background information is available in Volume I.

Other volumes in the guide pertain to administrative and general topics, facilities and equipment, waste management, workplace and environmental monitoring, and employee health. In addition, HAI has produced a subject-specific guide, titled *The September* 1957 Rocky Flats Fire: A Guide to Record Series of the Department of Energy and Its Contractors, which researchers should consult for further information about records related to this incident.

The Epidemiologic Records Inventory Project

The Epidemiologic Records Inventory Project is indicative of DOE Secretary Hazel R. O'Leary's efforts to support openness initiatives in the areas of environment, safety, and health. In view of the importance of various administrative, organizational, and operational records to epidemiologic and health-related studies, a moratorium on the destruction of such records has been in effect since 1989.

In May 1992, the DOE Office of Epidemiology and Health Surveillance (EH-42), responsible for the coordination of all health-related activities throughout the DOE complex, directed each DOE and DOE contractor site to prepare an inventory of all records useful for worker or community health-related studies. EH-42 prepared and furnished each site with guidelines that defined epidemiologic records, provided instructions for describing record series, outlined the sites' role in inventorying epidemiologic records, and discussed the relationship of the epidemiologic inventory to DOE's comprehensive records inventory. The epidemiologic inventories should be completed in 1995. It should be noted, however, that some of the information contained

in the site records inventories, such as the location of active (still in use) records or the volume of the records, may change over time. The continued usefulness of the inventories and this guide depends on their systematic update.

Role of HAI

In August 1993, DOE selected HAI as its support services contractor for the Epidemiologic Records Inventory Project. HAI, a professional records management, archives, and historical research services firm incorporated in 1981, has provided records management, historical research, and technical support for a number of DOE projects. HAI's role in the project includes verifying the accuracy, comprehensiveness, and quality of existing inventories, providing guidance to site records management teams, and, in some cases, performing additional records inventories.

BACKGROUND

History of Production and Materials Handling

The Atomic Energy Commission (AEC) assigned Rocky Flats two main weaponsproduction missions: the fabrication of nuclear weapon components, specifically plutonium pits, and the processing of plutonium from retired nuclear warheads.

The life cycle of a nuclear weapon is comprised of seven phases: conception, feasibility studies, development engineering (prototype study), first production (start-up), quantity production and stockpile, and retirement and dismantlement. Activities at Rocky Flats concerned the fourth through seventh phases, with particular emphasis on start-up and quantity production. Rocky Flats produced most of the plutonium pits, or triggers, for use in nuclear weapons. A pit is a first-stage fission bomb which is used to detonate the second-stage fusion reaction in a hydrogen or nuclear bomb. Pits are generally constructed from varying amounts of plutonium, uranium, beryllium, aluminum, and stainless steel, depending on the specific weapon being produced.

The plant also manufactured components for other portions of the weapon since it had the facilities, equipment, and expertise required for handling the materials involved. A component is a single part of a weapon which is joined with other components to form an assembly, or larger piece of a weapon. Assemblies are then joined with other components and assemblies to form a complete weapon. Assemblies and components are specifically created for one of several weapons programs. Each program is identified by a code number such as W76 or W88.

Plant production operations originally occurred in four self-contained areas of the plant site, known as A, B, C, and D.¹ As weapons requirements changed and operations expanded, the areas grew beyond the original self-contained boundaries. Plant A (Building 444), built in 1953, fabricated depleted uranium parts almost exclusively until a change in weapons concepts refocused operations on beryllium components. Plant B (Building 881) came online in 1953 to recover enriched uranium and to produce parts from the recovered uranium. In 1966, a growing requirement for stainless steel

components brought "J-Line" operations to Building 881 from American Car and Foundry Industries (ACF) in Albuquerque, New Mexico, when the AEC curtailed ACF's contract. In 1984, Building 460 also began conducting J-Line operations. Plant C was built in 1953 to hold plutonium operations and is now known as Building 771. During plant expansion in 1958, Buildings 776 and 777 were put online for plutonium operations as well. Production units in Building 991, Plant D, also built in 1953, conducted the final assembly of the product. Rocky Flats shipped completed components and assemblies to the Pantex Facility in Amarillo, Texas, for incorporation into the finished weapons. Retired weapons and weapon components were sent back to Rocky Flats as "site returns," where they were disassembled and their valuable materials recovered for reuse.²

In November 1989, while the plant was shut down for an annual inspection, DOE announced its decision to cease plutonium operations permanently at the site.³ After production and disassembly operations at Rocky Flats ceased, DOE transferred these activities to other facilities.

Production and Materials Handling Organizations

Dow Chemical Company (1952-1975)

During the first decade of weapons production at Rocky Flats, activities were centered under the manager of the Production Organization and further subdivided by plant areas A (Building 44), B (Building 81), and C (Building 71) Production divisions. Plant area D Operations and Quality Control activities were managed by a separate division under the Executive Office. Supporting functions were conducted by the Technical Staff, Engineering, and Accountability and Production Control organizations and the Analytical Laboratory. In 1956, Dow created a fourth production section under the Production Division to encompass activities in Area 83. A member of the Technical Staff Department became the nuclear safety official in 1963. From approximately 1969 to 1971, production and supporting activities apparently occurred under the Manufacturing Manager, Quality Manager, and Director of Research and Development. In August of 1971, Dow reorganized these operations under the Assistant General Manager for Operations, who supervised the Fabrication, Quality, Support, Chemical Operations, Development Projects, and Product Sections. Dow created the office of Nuclear Safety Director, supervised by the Plant General Manager, in July 1972.

Rockwell International (1975-1989)

During Rockwell's tenure, the organization of the plant underwent little change. The Office of the Assistant General Manager administered the Production Operations, Chemical Operations, Production and Nuclear Materials Control, Development Product Engineering, Research and Development, and Quality Engineering and Control organizations responsible for most of the weapons production and support activities at Rocky Flats. Restructuring in April 1977 placed the Production, Chemical Operations, and Quality Engineering and Control Departments under the supervision of the Operations Division Plant Director. Rockwell also placed the Research and Development and Support Operations Divisions at the same organizational level as the

Development and Support Operations Divisions at the same organizational level as the Operations Division. In March 1981, the Chemical Operations Department was renamed the Plutonium Operations Department. Later that same year, Rockwell realigned all of the departments under the Operations Division and the other divisions onto an equivalent division level. Safeguards and Materials Management moved into this array in June 1984. The Nuclear Safety Department operated out of the Health, Safety, and Environment Division during this time, changing its name to Nuclear and Facilities Safety in 1979.

EG&G (1990-1995)

When EG&G took over the management and operations contract in 1990, Rocky Flats had ceased producing weapon components, although production-related organizations continued to exist for another two years. During that time, EG&G reorganized the site several times to transform it to cleanup status. For the first half of 1990, production, safety, and material operations were centered under the Associate General Manager for Defense Production. By the end of 1990, however, EG&G terminated the Defense Production Division and split its activities between the Plutonium Production, Plutonium Recovery, and Non-Plutonium Operations organizations. By 1993, the site had completed its transition to cleanup status.

ACCESS

For complete information regarding access to the records, please refer to Volume I. The Department of Energy's Rocky Flats Plant: A Guide to Record Series Useful for Health-Related Research.

For specific information or permission to review Rocky Flats records, contact:

U.S. Department of Energy Records Management Department Contracts and Services Division Rocky Flats Office P.O. Box 928 Golden, CO 80402-0928 Telephone Number: (303) 966-6177

SCOPE

Pit and component production involved the use, manufacture, and assembly of highly regulated, sensitive, and precision-made materials and components. To insure that all stages of production met the painstaking material and design specifications developed during planning phases, a detailed paper trail was created during all stages of the production process. Each component in production was accompanied by a "traveler," which detailed every operation undergone by the component, from fabrication to testing,

physically accompanied a component throughout the manufacturing process. As components became part of larger assemblies, the travelers were also combined, along with inspection test results, radiograph results, and related materials, to form what is commonly referred to as a Bomb Book or War Reserve (WR) Bomb Book.

These books, officially named Stockpile Approved Product Records (SAPRs), are the most complete historical record for each nuclear weapon and weapon component in the nation's weapons stockpile. They contain many types of information, including employee names and identification numbers, buildings or locations where production occurred, the type of part or process being undertaken, and M-document numbers. M-documents are written procedures that provide detailed, step-by-step instructions for the processes followed by the workers and contain information regarding the types of chemical mixtures, solvents, and handling requirements used for each of those steps.

A large part of the production activities entailed maintaining meticulous tracking records for all of the nuclear materials involved in production and research. DOE required plant operators to maintain tight control over all of the materials entering, leaving, or moving about the plant area. This included raw materials and components coming from contractors and other DOE facilities, assemblies leaving the site for Pantex, items moving between onsite production areas, scrap materials awaiting decontamination and recovery, materials used for special orders, and materials lost through normal handling and use.

This volume contains descriptions of the various records regarding product and material tracking, specifications, manufacturing, and testing and inspections activities which were created by numerous organizations and groups. Material inventory and tracking summary reports, inspection and certification test results, engineering drawings and specifications, and procedure instructions are among the documents produced for production activities and described here. The records in this volume were created by such diverse groups as Production Control, Product Engineering, Non-Nuclear Projects, Technical Writing, Non-Destructive Testing, Final Part Certification, Nuclear Safety, Metallography Laboratory, Analytical Laboratories, Nuclear Materials Control and Accountability, Special Order Engineering, Metallurgical Operations, and Program Planning and Control. As part of DOE's current weapons complex reconfiguation plan, production-related records are in the process of being transferred to other locations, primarily Los Alamos National Laboratory and the Kansas City Plant.

This volume reflects information collected from research conducted during site visits from March 1994 through January 1995. Users of this volume should note that omissions are likely due to the nature of the records targeted for research. For example, the June 6, 1989, seizure of records by the Federal Bureau of Investigation rendered an unknown quantity of records unavailable for review by HAI staff. Moreover, HAI team members did not inventory records stored in radiation-controlled areas.

HAI relied on existing finding aids prepared for Rocky Flats records. HAI was unable to verify that these research tools include all records that may exist. In addition,

researchers should note that records at all of the repositories listed in this guide may be moved, transferred to a different location, reviewed for changes in disposition authority, and changed to a different format (i.e., from paper to microfilm).

ARRANGEMENT

Records series in this volume are arranged alphabetically. For further information, please refer to Volume I. The Department of Energy's Rocky Flats Plant: A Guide to Record Series Useful for Health-Related Research.

NOTES

1. In the early years, Rocky Flats' facilities were known by different names. Building 444 was referred to as Building 44 or Plant A; Building 771 was referred as Building 71 or Plant C; Building 881 was referred to as Building 81 or Plant B, and Building 991 was referred to as Building 91 or Plant D.

2. Background material was taken from ChemRisk, Project Tasks 3 & 4: Final Draft Report: Reconstruction of Historical Rocky Flats Operations and Identification of Release Points (1992), 43-96.

3. Michelle A. Hanson, "Site History of Rocky Flats" (Washington, DC: United States Department of Energy History Division, January 1993), 17.

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Advance Change Orders (ACOs), 1968-1987

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Confidential/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number. G223, H322-H324

Container Number: G223, H322-H324

Scanning Suitability: Series consists of forms and colored paper.

Arrangement: Chronological

Originating Office: Final Quality Assurance and Control Organization and Production Definition and Configuration Management Organization of Dow Chemical Company and Rockwell International

Finding Aids: Record Storage Receipt

Disposition Authority: DOE (1988) 3.1e

Series Description: This series consists of Advance Change Orders (ACOs), which were used to authorize product modifications before the corresponding changes were made in the drawing or procedure documents. The orders include names of requesters and receivers of the ACOs, distribution, reasons for the changes, descriptions of the changes, drawing or document revision numbers, and approval signatures. The records were written either by Sandia National Laboratories, Livermore (SNLL) or Lawrence Livermore National Laboratory (LLNL) engineers or by a Rocky Flats product engineer with SNLL or LLNL approval.

For related records, see Volume IV. Engineering Change Requests (ECRs), 1963-1966, 1976-1980 and Engineering Orders (EOs), 1978-1991.

Data Elements: 8, 89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 4.0 cu. ft.

Condition: Good

Medium: Paper

Duplication: Unknown

American Car and Foundry Industries (ACF) Inspection and Certification Records, 1961-1968

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Confidential/RD; 881 Archives is a security-controlled area.

Accession or Other ID Number: A242, A250, A254, A257-A259, A263, A295-A297, A300, A303, A305, A329-A330, E264, E334

Container Number: A242, A250, A254, A257-A259, A263, A295-A297, A300, A303, A305, A329-A330, E264, E334

Scanning Suitability: Series contains microfilm and poor quality photocopies.

Volume: 3.0 cu. ft. and 597 partial reels

Condition: Good to poor; some hardcopy records are deteriorating.

Medium: Paper and microfilm

Duplication: Unknown

Arrangement: Hardcopy records are loosely chronological; microfilm reels are numerical by folder number.

Originating Office: Product Control and Product Engineering organizations, Dow Chemical Company; Inspection and Quality Control Department, American Car and Foundry Industries

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

American Car and Foundry Industries (ACF) Inspection and Certification Records, 1961-1968 (continued)

Series Description: This series is comprised of inspection and certification documents, or travelers, for "J-Line" stainless steel components manufactured by American Car and Foundry Industries (ACF) of Albuquerque, New Mexico. Each document contains information concerning inspection results for a component. Data on the forms include a brief description of the component, ACF part number, project and reference drawing numbers, serial number, inspection specifications, remarks, and inspectors' stamp and signatures. Cover letters which accompanied the travelers and contain part serial and shipper numbers are also included.

For related records, see Volume IV. American Car and Foundry Industries (ACF) Production Route Cards, 1961-1968.

Data Elements: 89, 120

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American Car and Foundry Industries (ACF) Production Route Cards, 1961-1968

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Confidential/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: A242, A250, A254, A257-A259, A262, A265, A295-A297, A300, A303, A305, A329-A330

Container Number: A242, A250, A254, A257-A259, A262, A265, A295-A297, A300, A303, A305, A329-A330

Scanning Suitability: Series contains microfilm.

Arrangement: Numerical by folder and part number

Originating Office: Product Control and Product Engineering organizations, Dow Chemical Company; Quality Acceptance Department, American Car and Foundary Industries

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series consists of microfilm and paper copies of production route cards, or travelers, for "J-Line" stainless-steel components manufactured by American Car and Foundry Industries of Albuquerque, New Mexico, for weapons production at Rocky Flats. Each card indicates part number and description; raw material specifications, unit quantity, and size; requisition date; material certification and operator numbers; machine group and number; operation description; heat code; sequence of operations; defective parts and finished goods reports; and tooling information.

For related records, see Volume IV. American Car and Foundry Industries (ACF) Inspection and Certification Records, 1961-1968.

Data Elements: 16, 88-89, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 2.0 cu. ft. and approximately 591 partial reels

Condition: Good to fair

Medium: Paper and microfilm

Duplication: Unknown

American Car and Foundry Industries (ACF) Special Product Numbers Log, 1961-1967, 1989, 1991

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Record is classified as Secret/RD; 881 Archives is a securitycontrolled area. Volume: 0.05 cu. ft.

Accession or Other ID Number. B241

Container Number: B241

Medium: Paper

Condition: Good

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Numerical by special product number

Originating Office: Product Definition and Configuration Management Organization of Dow Chemical Company, Rockwell International, and EG&G

Finding Aids: Records Storage Receipt

Disposition Authority: DOE (1988) 3.1d

Series Description: This log was used to track numbers assigned to stainless steel products manufactured for the Rocky Flats plant by American Car and Foundry Industries of Albuquerque, New Mexico. The log provides special product numbers, weapon program designations, drawing numbers, dates issued, and related comments, such as "canceled."

Data Elements: 89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Americium Recovery Reports, 1974-1982, 1985-1988

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: 1) E142, E144; 2) H394

Container Number: 1) E142, E144; 2) H394

Condition: Fair

Volume: 1.49 cu. ft.

Medium: Paper

Scanning Suitability: Series consists of computergenerated reports. Duplication: Unknown

Arrangement: Chronological

Originating Office: Nuclear Materials Control Organization of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: 1) Record schedule under revision; 2) DOE (1980) C26.4a

Series Description: This series consists of computer-generated reports labeled COEI [Composition of Ending Inventory] Reports, which document the amounts of recoverable americium in backlog residues. Reports include COEI line numbers, ANSI [American National Standards Institute] and element codes, element net weights (in grams), and project codes.

Data Elements: 89, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Analytical Gallium Run Results, 1986

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number. E252

Container Number: E252

Scanning Suitability: Series consists of computer-generated reports.

Arrangement: Reverse chronological

Originating Office: Production Support Laboratory, Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series consists of reports containing analytical data from gallium samples. Data include sample type code, "drift standard," "drift corrected and net intensities" in counts per second, and concentration in wt. % [weight percent]. Some of the reports appear to indicate the presence of nickel and iron in the samples.

Data Elements: 89

Volume: 0.9 cu. ft.

Condition: Good

Medium: Paper

Duplication: Unknown

Assembly and Component Logs, 1960-1961, 1967-1987

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified up to Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: 1) A157; 2) A266, A343; 3) B347; 4) C293, E130

Container Number: 1) A157; 2) A266, A343; 3) B347; 4) C293, E130

Medium: Paper

Scanning Suitability: Series contains handwritten logs with colored paper.

Arrangement: Numerical by part type or program number

Originating Office: Production Control and Quality Acceptance organizations of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: 1) DOE (1988) 3.2b; 2) Records schedule under revision; 3) DOE (1980) C26.2b; 4) Records schedule under revision

Series Description: This series consists of handwritten logs used to track the disposition of components and assemblies received or made by Rocky Flats. Log entries indicate part type and unit serial number; dates certified and accepted; shipping or receipt date; MC [major component], lot, operation, weapons program, heat, and control numbers; and final disposition.

Data Elements: 88-89, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV

.

Duplication: Unknown

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Condition: Fair

Volume: 3.8 cu. ft.

Assembly/Disassembly Site Return Records, 1964-1983, 1986-1988

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified up to Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: B109, B250, D109, D249, D259, E138, E268-E269, E308, G368, H240, H294, H344

Container Number: B109, B250, D109, D249, D259, E138, E268-E269, E308, G368, H240, H294, H344

Scanning Suitability: Series consists of oversized computer-generated reports, colored paper, forms, and handwritten data.

Arrangement: Chronological and numerical by program or serial number

Originating Office: Nuclear Materials Management, Product Engineering, Product Integrity and Surveillance, Product Physical Chemistry, Statistics and Nuclear Materials Control, and Stockpile Reliability Evaluation Program organizations of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: Assembly/Disassembly Site Returns, or Site Return Cards, accompanied pits and weapon components which were returned to Rocky Flats for disassembly and reuse or retirement. The cards include shop travelers, which record steps taken to disassemble pits or components. These contain such data as part and serial numbers, part description codes, classification levels, drawing or specification document numbers, employee identification numbers, dates received, reasons returned (i.e., retired, "SRP," site reject, or other), test results documenting component disintegration or damage, and visual inspection results. The series also contains computer-generated reports which track the addition and subtraction of units from the nuclear materials inventory. Returns may have come from Lawrence Livermore National Laboratory, Lawrence Radiation Laboratory (now Lawrence Berkeley Laboratory), or Los Alamos Scientific Laboratory (now Los Alamos National Laboratory).

For related records, see Volume IV. Stockpile Approved Product Records (SAPRs), 1955-1993.

Data Elements: 16, 88-89, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 11.66 cu. ft.

Condition: Good

Medium: Paper

Duplication: Unknown

Assembly Function Test Results, 1962, 1978-1981

Access Restrictions: Records are classified up to Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number. A192, B138, E174

Container Number: A192, B138, E174

Scanning Suitability: Series contains drawings, graphs, charts, oversized forms, photographs, and handwritten data.

Arrangement: Numerical by assembly unit number

Originating Office: Non-Destructive Testing-Research and Development, Non-Nuclear Projects, Production Control, and Quality Engineering organizations of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series contains the results of tests conducted to assess the functionality and general quality of various assemblies. These include pressure tests, with results in psig [pounds per square inch gage], torque tests, and other destructive and non-destructive tests. In addition to the test results, the reports provide serial and assembly numbers, inspection signatures, and dispositions (i.e., whether assemblies were rejected or accepted).

For related records, see Volume IV. Stockpile Approved Product Records (SAPRs), 1955-1993.

Data Elements: 89

Volume: 1.44 cu. ft.

Condition: Good to fair

Medium: Paper and photographs

Duplication: Unknown

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-17

Location: Active: Inactive: RF-881 Archives, Room 214

Assembly Process Cards, 1965-1984, 1986, 1989

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: 1) A192, A404-A405; 2) B153, B239; 3) B264, G300

Container Number: 1) A192, A404-A405; 2) B153, B239; 3) B264, G300

Scanning Suitability: Series contains colored paper, computer-generated reports, and handwritten data.

Arrangement: Numerical by part or program number

Originating Office: Technical Writing and Product Engineering organizations of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: 1) Records schedule under revision; 2) DOE(1988) 3.1b; 3) Records schedule under revision

Series Description: Assembly Process Cards document the assembly of components into units. The cards list part name; serial and lot numbers; operations steps and descriptions; M-document, revision, specification drawing, and operation numbers; employee numbers and dates for each operation; comments noted by the operators; job numbers; time elapsed; NDT [Non-Destructive Testing] organization signatures; and Atomic Energy Commission and deviation numbers.

For related records, see Volume IV. Stockpile Approved Product Records (SAPRs), 1955-1993.

Data Elements: 16, 88-89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-18

Volume: 3.38 cu. ft.

Condition: Good

Medium: Paper

Duplication: Unknown

Assessment of Nuclear Materials Inventory Reports, 1975-1979, 1981

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: E122

Container Number: E122

Scanning Suitability: Series consists of computer-generated reports.

Arrangement: Chronological, thereafter by program

Originating Office: Nuclear Materials Control Organization, Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series consists of annual reports which assess the purpose of the nuclear materials inventory for each program. The reports also include project numbers and titles, Composition of Ending Inventory line numbers, SS [stainless steel] element weights in grams, and wt, % [weight percent] of plutonium-240.

Data Elements: 89, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 0.15 cu. ft.

Condition: Good

Medium: Paper

Duplication: Unknown

ATMX [Atomic Materials Rail Transfer] Railcar Safety Analysis and Procedures Manual, 1976

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Record is classified as Confidential/NSI; 881 Archives is a security-controlled area.

Accession or Other ID Number. B123

Condition: Fair

Volume: 0.02 cu. ft.

Container Number: B123

Scanning Suitability: Series contains drawings.

Duplication: Unknown

Medium: Paper

Arrangement: None

Originating Office: Special Order Engineering Organization, Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This procedures manual provides guidance for the manufacture of the Atomic Materials Rail Transfer (ATMX) railcar and for the storage, handling, and assembly of explosive components transported by ATMX railcar. The manual discusses worker responsibilities; storage and transfer procedures; quantities and types of materials used; emergency controls; and general precautions. Specification drawings for the project are also included. It appears that the procedures were used in Building 664.

For related records, see Volume III. Welding Procedures and Operating Manuals, 1976-1977, 1979-1981.

Data Elements: 88-89, 102, 107

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Beryllium Bonding Process Records, 1984, 1986-1988

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: B159

Container Number: B159

Volume: 1 cu. ft.

Condition: Good

Medium: Paper, slides, photographs, and transparencies

Scanning Suitability: Series contains slides, photographs, and transparencies.

Arrangement: Numerical by Control Document number

Originating Office: Program Management Organization, Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: DOE (1988) 3.5b

Series Description: This series documents the process used to bond beryllium components into assemblies that were sent to the Y-12 Plant at Oak Ridge and to the Pantex site. Most of the records deal with bond failures and include correspondence, meeting minutes, transparencies, background data, and handwritten notes. Also included are orders to cease using the process, reports from the task force assigned to study the process, and photographs and slides of faulty components.

Data Elements: 88-89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Duplication: Unknown

Beryllium Processing Files, 1947-1968

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified up to Confidential/RD; 881 Archives is a security-controlled area.

Accession or Other ID Number: H264

Container Number: H264

Scanning Suitability: Series contains photographs, faded photocopies, thermal facsimile paper, and handwritten notes.

Arrangement: Loosely chronological

Originating Office: General Fabrication Research and Development Group, Dow Chemical Company

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series consists of memoranda, correspondence, reports, black-andwhite photographs, bibliographies, meeting minutes, and manufacturing and shipping data pertaining to beryllium production. Of particular interest are a copy of a 1961 report of an explosion in a Building 444 vacuum furnace and similar incidents at other sites; beryllium fabrication and forging process reports; pit data; general industry information; and feasibility studies for processing and storing components, pits, and scrap.

Data Elements: 88-89, 122

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 0.5 cu. ft.

Condition: Fair

Medium: Paper and photographs

Duplication: Unknown

Bill of Material - Record of Change Forms, 1963-1969

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: A119

Container Number: A119

Scanning Suitability: Series consists of handwritten forms.

Arrangement: None

Originating Office: Production Control Organization, Dow Chemical Company

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series consists of Bill of Material - Record of Change forms that presumably detail shipments to and from Rocky Flats. Data on each form include Dow Chemical Company identification number, Atomic Energy Commission part number, quantity, type of material, material description, average weight, supply source, drawing and specification document numbers, size and weight of the shipping container, radiation measurements in millirems per hour at the surface and at one meter from the container, assembly type, and weapon program code.

Data Elements: 89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 0.25 cu. ft.

Condition: Good

Medium: Paper

Duplication: Unknown

Building 371 Nuclear Materials Safety Manual, 1981

Location: Active:

Inactive: RF-DOE Safety and Health Division Library, Building 116

Access Restrictions: Record is unclassified; building is in an access-controlled area.

Volume: 0.1 cu. ft. (1 volume)

Condition: Good

Accession or Other ID Number: None

Container Number: None

Medium: Paper.

Scanning Suitability: Series contains floor plans.

Duplication: Unknown

Arrangement: None

Originating Office: Energy Systems Group, Rockwell International

Finding Aids: DOE Records Management maintains a shelf inventory list.

Disposition Authority: Designated for periodic review by DOE Records Management.

Series Description: This is a single volume, titled Nuclear Materials Safety Manual for Building 371, which was prepared by Rockwell's Energy Systems Group. The manual describes the nuclear materials safety limits designed to prevent criticality accidents. Among the subjects addressed in the manual are NDA [Nondestructive Assay] and materials control, incinerators, ion exchange purification, americium recovery, utilities, and hot maintenance. Floor plans are included.

Data Elements: 81, 89, 117

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Building 551 Chemical Inventory Report, 1993

Location: Active: RF-T452 D Inactive:

Access Restrictions: Record is unclassified; building is in an access-controlled area.

Volume: 0.1 cu. ft. (1 report)

Condition: Good

Medium: Paper

Duplication: Unknown

Accession or Other ID Number: None

Container Number: 951

Scanning Suitability: Suitable

Arrangement: None

Originating Office: Industrial Hygiene Organization, EG&G

Finding Aids: None

Disposition Authority: DOE (1988) 4.1a

Series Description: This is a single report which provides descriptions, locations, and classifications of all chemicals stored in Building 551. Also included are procedures for handling and storing the chemicals. The report is located in the chronological files of the Industrial Hygiene Organization.

Data Elements: 77, 88-89, 115

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Building 707 Operations Resumption Report, 1992

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Record is unclassified; 881 Archives is a security-controlled area.

Accession or Other ID Number: A113

Container Number: A113

Scanning Suitability: Suitable

Arrangement: None

Originating Office: General Manager's Office, EG&G

Finding Aids: Records Storage Receipt

Disposition Authority: DOE (1980) 19.12

Series Description: This series consists of a report describing the ongoing progress and future plans for resuming plutonium and related operations in Building 707. The report provides a resumption schedule and a list of safety objectives and related activities, including those to be undertaken by the Defense Nuclear Facilities Safety Board.

For related records, see Volume II. Defense Nuclear Facilities Safety Board (DNFSB) Audit Records, 1990.

Data Elements: 88-89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 0.12 cu. ft.

Condition: Good

Medium: Paper

Duplication: Unknown

Building 771 Outfall Monitoring Records, 1971

Location: Active: Inactive: DFRC

Access Restrictions: Unclassified

Accession or Other ID Number: 434-94-0039

Container Number: 15387; series records are in a file folder labeled Historical Files - 771 Outfall.

Scanning Suitability: Series contains colored graph paper with handwritten notes.

Duplication: Unknown

Arrangement: None

Originating Office: Health Physics Organization, Dow Chemical Company

Finding Aids: NARA Standard Form 135

Disposition Authority: DOE (1988) 1.5f

Series Description: This series consists of correspondence, memoranda, maps, and handwritten notes which document the discovery and subsequent cleanup of a plutonium-contaminated section of the drainage area surrounding Building 771. Also provided are radioactivity levels in the outfall before and after decontamination and the number of employee hours spent on the cleanup.

Data Elements: 81, 89, 103, 124

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-27

Volume: 0.1 cu. ft.

Condition: Fair

Medium: Paper

Casting Run Records, 1982, 1984

Location: Active: Inactive: LANL-Technical Area 55, NMT-5

Access Restrictions: Records are classified as Secret/RD; Technical Area 55 is a securitycontrolled area.

Accession or Other ID Number. MF-RF-QE

Condition: Good

Volume: 3 reels

Container Number: Reels 1-3

Scanning Suitability: Series consists of microfilm.

Medium: Microfilm

Duplication: Master microfilm copies are in the LANL Records Center.

Arrangement: Numerical by reel number, thereafter by part or casting number

Originating Office: Quality Engineering Organization, Rockwell International

Finding Aids: PSP Database

Disposition Authority: DOE (1988) 3.3

Series Description: This series documents component casting. Data in the records include part types, cast numbers, casting dates, operator names (last only), furnace and rim face numbers, "HIM" times, "indent" numbers, book weights, mold numbers, location or can numbers for feed materials and buttons, criticality procedure numbers, and crucible temperatures.

Data Elements: 88-89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Cathode Testing Log Sheets, 1985-1987

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Confidential/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: D269

Container Number. D269

Scanning Suitability: Series consists of forms and computer-generated reports.

Arrangement: Chronological

Originating Office: Assembly Organization (Building 444), Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: These log sheets and computer-generated reports contain raw data which presumably indicate results of hot hollow cathode testing on unspecified materials. Data in the records include employee number of the person conducting the test, test duration in minutes, cathode and bias voltage currents, crucible temperature, gas flow, and vacuum in mmHg [millimeters of mercury] for three stages of testing (melt, cleaning, and deposition). Part type, serial number, and weight before the test are also included, as well as a comments section for additional information.

Data Elements: 16, 88-89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 1 cu. ft.

Condition: Fair

Medium: Paper

Duplication: Unknown

Chemical and Foundry Operations Procedures and Guidelines, 1970-1988

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified up to Confidential/RD; 881 Archives is a security-controlled area.

Accession or Other ID Number: 1) A122; 2) A181, A185-A186; 3) B280; 4) B297; 5) E137; 6) SWV124

Container Number: 1) A122; 2) A181, A185-A186; 3) B280; 4) B297; 5) E137; 6) SWV124

Scanning Suitability: Series contains colored paper.

Volume: 8 cu. ft.

Condition: Fair

Medium: Paper

Duplication: Some records are available on microfilm in the 881 Archives: 1) MF-RF-TW, Reels 9-10; 2) MF-RF-TW, Reels 2-3, 5-7; 3) MF-RF-TW, Reels 11-12; 4) MF-RF-TW, Reel 8; 5) Unknown; 6) MF-RF-TW, Reel 4.

Arrangement: Numerical by procedure/operation number

Originating Office: Technical Writing Organization of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: 1-4) GRS 16.1a; 5) DOE (1988) 2.4a; 6) GRS 16.1a

Series Description: This series consists of procedures and guidelines for chemical and foundry operations, mostly in Buildings 371, 374, 707, 776-778, 881, and 883. The records provide detailed instructions for both maintaining and deactivating routine operations. Also addressed are the various hazards associated with specific chemical and foundry processes.

Data Elements: 88-89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Component Design Drawings and Specifications, 1956-1991

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: 1) A144, A192; 2) B241

Volume: 1.19 cu. ft.

Condition: Good

Container Number: 1) A144, A192; 2) B241

Medium: Paper and photographs

Scanning Suitability: Series contains oversized drawings on colored paper, photographs, and handwritten data.

Duplication: Unknown

Arrangement: Numerical by drawing/specification number

Originating Office: Production Definition and Configuration Management Organization of Dow Chemical Company, Rockwell International, and EG&G

Finding Aids: Records Storage Receipt

Disposition Authority: 1) Records schedule under revision; 2) DOE (1988) 3.1d

Series Description: This series consists of design drawings and specifications for components produced at Rocky Flats. The data include component dimensions; part number; POS [Production Operation Sheet] and revision numbers; drawing number and title; work center; date; Quality Control, manufacturing, and "T.C." approvals; tool/gage and operations descriptions; turret position; tool offset; and the names of persons who produced the drawings. Also in the series are logs which were used to track numbers assigned to drawings that Los Alamos National Laboratory produced for Rocky Flats. These provide page numbers and titles, drawing numbers and titles, revisions, and the names of persons assigned to produce the drawings.

Data Elements: 89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Component Inspection and Certification Records, ca. 1954, 1959-1989

Location: Active:

Inactive: RF-881 Archives, Room 214; LANL-Technical Area 55, NMT-5

Access Restrictions: Records are classified up to Secret/RD; 881 Archives and Technical Area 55 are security-controlled areas.

Accession or Other ID Number. RF-881 Archives:

- 1) A157
- 2) A183, A404
- 3) **B**163
- 4) B190, B194, B198, B202-B203, B205-B214, B224, B244-B245, B256-B257, B272, B278, B284, B286-B287, B293, B302
- 5) B303
- 6) B358-B361, C134-C139, C164, C188, C200-C208, C211, C216-C217, C221-C223, C249-C250, C252-C253, C259, C262, C264-C272, C274-C281, C298-C303, C305, C319, C333-C337, C339, C372, D115-D117, D128-D129, D132, D134-D141, D156-D159, D163, D183, D220, D282-D289, D310, D319-D321, D323-D329, D331-D336, D338-D339, D366, D368, D371-D375, D377-D379, D383, E112-E113, E131, E140, E200, E204, E219, E332, G146-G149, G151, G158-G159, G161-G163, G170, G185, G200-G203, G205, G214-G215, G227, G252, G270, G311-G312, G334, G346-G347, G350-G351, G362, G364-G365, G386-G387 7) H201
- 8) H238

Volume: 205.11 cu. ft. and 297 reels

Container Number:

- 1) A157
- 2) A183, A404
- 3) B163
- 4) B190, B194, B198, B202-B203, B205-B214, B224, B244-B245, B256-B257, B272, B278, B284, B286-B287, B293, B302
- 5) B303
- 6) B358-B361, C134-C139, C164, C188, C200-C208, C211, C216-C217, C221-C223, C249-C250, C252-C253, C259, C262, C264-C272, C274-C281, C298-C303, C305, C319, C333-C337, C339, C372, D115-D117, D128-D129, D132, D134-D141, D156-D159, D163, D183, D220, D282-D289, D310, D319-D321, D323-D329, D331-D336, D338-D339, D366, D368, D371-D375, D377-D379, D383, E112-E113, E131, E140, E200, E204, E219, E332, G146-G149, G151, G158-G159, G161-G163, G170, G185, G200-G203, G205, G214-G215, G227, G252, G270, G311-G312, G334, G346-G347, G350-G351, G362, G364-G365, G386-G387 7) H201 8) H238

Component Inspection and Certification Records, ca. 1954, 1959-1989 (continued)

Accession or Other ID Number (cont'd) 9) H275 10) SWV123 11) TBF196-TBF200, TBF203-TBF204, TBF206 LANL: 12) MF-RF-QA

Condition: Good to fair

Container Number (cont'd)

9) H275

10) SWV123

- 11) TBF196-TBF200, TBF203-TBF204, TBF206
- 12) Reels 1-57, 59-60, 63-294, 298-300, 305-306, 308-310, 312

Medium: Paper, microfilm, and photographs

Scanning Suitability: Series contains microfilm, keypunch cards, photographs, forms, handwritten data, computer-generated reports, graphs, blurred printing, and colored paper. Duplication: TBF accessions are to be microfilmed; master microfilm copies of the records at LANL are in the LANL Records Center.

Arrangement: Numerical by job, assembly program, or part serial number

Originating Office: Fabrication Technology, Final Product Certification, Final Quality Acceptance and Control, Non-Destructive Testing-Research and Development, Non-Plutonium Production, Physical Metallurgy-Research and Development, Product Engineering, Production Control, and Quality Assurance organizations and the Metallography Laboratory of Dow Chemical Company and Rockwell International

Finding Aids: 1-11) Records Storage Receipt; 12) PSP Database

Disposition Authority: 1) DOE (1988) 3.5b; 2) Records schedule under revision; 3) DOE (1988) 3.2, 3.4; 4) Records schedule under revision; 5) DOE (1980) C26.4a; 6) Record schedule under revision; 7) DOE (1988) 3.2; 8) Records schedule under revision; 9) DOE (1988) 3.4; 10) **D**OE (1988) 3.2b; 11-12) DOE (1988) 3.3

Series Description: Inspection and Certification records include the same types of forms found in the Stockpile Approved Product Records (SAPRs). These documents were used to insure that components manufactured by or for Rocky Flats met weapons programs design and manufacturing specifications. Test result reports may sometimes accompany

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Component Inspection and Certification Records, ca. 1954, 1959-1989 (continued)

Series Description (cont'd)

these inspection and certification records, but not as frequently as they do the SAPRs. The following is an alphabetical list of forms most commonly found in this series. Titles that appear in italics are those found on the forms themselves; others are those devised to best describe the content and nature of the form.

Certificate of Inspection forms contain QA [Quality Assurance] lots, item identification, and part numbers; part uses; submission status (whether an original or resubmission); inspection instructions; lot sizes; material and process certification numbers; date; remarks; and authorizing signatures.

Certification Tickets indicate part types, serial and lot numbers, Department of Energy part numbers, designations for "Accept, Scrap, Salvage, Rework, or Deviation," deviation numbers, final disposition codes, locations where materials were shipped, dates, reference numbers, certified part/"SA" type numbers, overall certification signatures, and acceptance stamps.

Final Part Certification Cards document that components met required specifications. They include casting/batch, radiofilm, serial, and "I&A" drawing and revision numbers; part types; materials specification certification drawing sheet and revision numbers; overall disposition code numbers; final disposition dates; material stream identifications; and verification and supervisory signatures.

Inspection Data Sheets were used to record component inspection results and final disposition. The forms contain part types; casting batch, WR [War Reserve] lot, Atomic Energy Commission part, materials specification certification drawing, material "p.o.," job, and part serial numbers; "I&A" drawing and revision numbers; overall dispositions; acceptance or rejection dates; materials types; and manufacturing disposition codes.

Measuring Record/Zeiss Comet Reports are computer-generated reports apparently created during component testing. They provide tape, serial, drawing and supplemental drawing, and operator numbers; dates; and results under the headings "ADR/REC," "Operat.," "U-Tol," "L-Tol," and "Dev."

Quality Control Disposition Cards describe defects and deviations in components found during manufacturing and inspection. Information included on the cards consists of date; part name and number; shop order number; originating department; operation number; machine group; production operator clock number and shift; inspection station; quantity received, inspected, and accepted; description and probable cause of the defect; and corrective and deviation actions.

For related records, see Volume IV. Deviation Request and Approval Records, 1958-1968, 1971-1973, 1978-1982, 1984 and Stockpile Approved Product Records (SAPRs), 1955-1993.

Data Elements: 8, 16, 88-89, 114, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Composition of Ending Inventory (COEI) Reports, 1989-1990

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area. Volume: 0.33 cu. ft.

Accession or Other ID Number. A382

Container Number: A382

Scanning Suitability: Series consists of oversized, computer-generated reports.

Arrangement: Numerical by material type number

Originating Office: Nuclear Materials Accounting Organization of Rockwell International and EG&G

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: Composition of Ending Inventory reports apparently were used to document amounts of nuclear materials in the Rocky Flats inventory. The reports list data types, dates, RIS [Receiving Inspection Station], material types, "Inventory Comp," IDC [Item Description Code] numbers, element and isotopic weights, project numbers, scrap codes, categories, weights of isotopes (in percentages), and product and owner codes.

Data Elements: 89

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.

IV-35

Duplication: Unknown

Condition: Fair

Medium: Paper

Criticality Recommendations, 1957-1970

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: A120, B306, D142, D211, G167, H312

Container Number: A120, B306, D142, D211, G167, H132

Scanning Suitability: Series contains bound volumes, handwritten data, floor plans, and drawings.

Condition: Good to fair

Volume: 2.6 cu. ft.

Medium: Paper

Duplication: Records in Accession Number H312 are available on microfilm in the 881 Archives under MF-RF-PHPR, Reel 3.

Arrangement: Varies; chronological or numerical by calculation or building number

Originating Office: Nuclear Safety and Product Organization and Health Physics Organization of Dow Chemical Company

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series consists of guidelines used to prevent plutonium from going critical during the various stages of processing and production. Recommendations, made for Buildings 771, 776, 777, 881, and 991, include safety procedures, locations and descriptions of the production processes involved, floor plans, drawings, and approval signatures. Also in the series are two notebooks used to record calculations which determined the criticality levels of various mixtures containing plutonium.

For related records, see Volume II. Nuclear Safety Criticality Group Progress Reports, 1952-1953, 1955-1956, 1958-1962, 1966-1974; Volume III. Building and Equipment Criticality Recommendation Records, 1958-1959, 1967-1979; and Volume IV. Criticality Safety Evaluation Reports, 1991-1994.

Data Elements: 88-89, 102, 107, 117

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Criticality Safety Assessment, 1989-1990

Location: Active:

Inactive: RF-DOE Safety and Health Division Library, Building 116

Access Restrictions: Record is unclassified; building is in an access-controlled area.

Volume: 0.25 cu. ft. (3 volumes)

Accession or Other ID Number: None

Container Number: None

Medium: Paper

Condition: Good

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: None

Originating Office: Scientech, Inc.; EG&G

Finding Aids: DOE Records Management maintains a shelf inventory list.

Disposition Authority: Designated for periodic review by DOE Records Management.

Series Description: This is a three-volume report, titled An Assessment of Criticality Safety at the Department of Energy Rocky Flats Plant, which was written to determine whether nuclear criticality accidents had occurred at Rocky Flats. The first volume, prepared by Scientech, Inc., evaluates the environmental impact of criticality accidents in general, as well as properties of fissile materials used in production, storage procedures, ventilation systems, and safety practices at Rocky Flats. While no evidence of criticality accidents was found, several recommendations were made for improving safety measures in production areas. The second and third volumes contain EG&G's response to the report.

Data Elements: 88-89, 122

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Criticality Safety Evaluation Reports, 1991-1994

Location: Active:

Inactive: RF-DOE Safety and Health Division Library, Building 116

Access Restrictions: Records are marked "Not for Public Dissemination"; building is in an access-controlled area.

Accession or Other ID Number. None

Container Number: None

Scanning Suitability: Suitable

Arrangement: None

Originating Office: DOE

Finding Aids: DOE Records Management maintains a shelf inventory list.

Disposition Authority: Designated for periodic review by DOE Records Management.

Series Description: This series consists of reports from studies undertaken to determine the probability of a criticality accident occurring at Rocky Flats. Various production operations in Buildings 371, 559, 707, 771, 774, and 776 are addressed, including plenum glovebox maintenance, filter handling and storage, process waste shipment and storage, and supercompactor operations.

For related records, see Volume II. Nuclear Safety Criticality Group Progress Reports, 1952-1953, 1955-1956, 1958-1962, 1966-1974; Volume III. Building and Equipment Criticality Recommendation Records, 1958-1959, 1967-1979; and Volume IV. Criticality Recommendations, 1957-1970.

Data Elements: 88-89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 5 cu. ft. (24 notebooks)

Condition: Good

Medium: Paper

IV-38

Duplication: Unknown

Density Logs, 1983-1985

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: E340

Container Number: E340

Scanning Suitability: Series consists of handwritten logs with colored paper.

Arrangement: Chronological

Originating Office: Product Engineering Organization, Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series is comprised of two logs used to record the densities of various components. Each entry lists the date of the test; casting number; part type; serial, carrier, and operation numbers; and two density readings. One of the logs pertains to Building 776 and includes notations indicating when filters and freon were changed in equipment probably used to take the density readings. It also notes the change dates and identification numbers of employees who performed each change.

Data Elements: 16, 88-89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-39

Volume: 0.2 cu. ft.

Condition: Fair

Medium: Paper

Duplication: Unknown

Development Job Order (DJO) Records, 1976-1978, 1981-1983

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified up to Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: A192, B123, B334

Container Number: A192, B123, B334

Scanning Suitability: Series contains forms, colored paper, diagrams, handwritten data, and photographs.

Arrangement: By DJO number

Originating Office: Non-Nuclear Project Engineering Organization and Program Planning and Control Organization of Rockwell International and EG&G

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: Development Job Orders (DJOs) are special orders, usually to vendors or contractors, for specific, limited work tasks (e.g., fabricating special components or creating design and procedure specifications for new components or assemblies). The series contains DJO authorization forms, copies of purchase orders, shipment records, special order certification data sheets, and assembly process cards, which relate to the job being ordered. Information found in the records includes DJO number; the project engineer's name; approval signatures; PO [Purchase Order] number; date; title of the equipment, material, or service requested; raw material source; part serial number; employee number; estimated hours needed to perform the work; Rocky Flats drawing number; inspection dates and results; radiographic report number; group account number; classification level; comments; and completion date. Part drawings and photographs accompany the records.

Data Elements: 16, 88-89, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 1.04 cu. ft.

Condition: Good to fair

Medium: Paper and photographs

Duplication: Unknown

Deviation Approval Correspondence, 1954-1961, 1963-1966, 1973

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified up to Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: 1) A126; 2) A157; 3) B254; 4) H220

Container Number: 1) A126; 2) A157; 3) B254; 4) H220

Scanning Suitability: Series contains faint carbon copies of teletypes.

Volume: 0.85 cu. ft.

Condition: Good to fair

Medium: Paper

Duplication: Unknown

Arrangement: Chronological and numerical by message number

Originating Office: J-Line Engineering, Product Definition, and Product Engineering organizations of Dow Chemical Company

Finding Aids: Records Storage Receipt

Disposition Authority: 1) Records schedule under revision; 2) DOE (1988) 3.5b; 3) DOE (1988) 3.1e; 4) DOE (1988) 3.2

Series Description: This series consists of correspondence requesting and giving approval for changes to production instructions and procedures and to components which did not meet specified standards. Rocky Flats engineers primarily wrote to Lawrence Radiation Laboratory (now Lawrence Berkeley Laboratory), Los Alamos Scientific Laboratory (now Los Alamos National Laboratory), Oak Ridge, and Sandia for approval. The requests indicate the document, procedure, or drawing numbers and corresponding word changes; reference manual changes; and similar requests. For parts which deviated from specifications, authorizations were given for shipment and use.

For related records, see Volume IV. Deviation Request and Approval Records, 1958-1968, 1971-1973, 1978-1982, 1984 and Deviation Request Logs, 1971-1973.

Data Elements: 88-89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Deviation Request and Approval Records, 1958-1968, 1971-1973, 1978-1982, 1984

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified up to Secret/RD; 881 Archives is a securitycontrolled area. Volume: 19.3 cu. ft. and 55 reels

> Medium: Paper and microfilm

Duplication: Unknown

Accession or Other ID Number:	Container Number:
1) A242, A250, A257-A258,	1) A242, A250, A257-A258,
A295-A296, A300, A303, A305,	A295-A296, A300, A303, A305,
A330	A330
2) B117	2) B117
3) B132	3) B132
4) B170	4) B170
5) B342, C146, C244, C321, C346	5) B342, C146, C244, C321, C346
6) C348	6) C348
7) C349	7) C349
8) D227	8) D227
9) D292, G026, G179	9) D292, G026, G179
10) H158	10) H158
11) H220	11) H220
12) H226, H342-H343, H365, H408	12) H226, H342-H343, H365, H408

Condition: Good to fair

Scanning Suitability: Series consists of copies, handwritten data, colored paper, teletypes, forms, computer-generated reports, and microfilm.

Arrangement: By component or assembly type, thereafter numerical by SXR, part, or request number

Originating Office: J-Line Engineering, Product Control, Product Definition, and Product Engineering organizations of Dow Chemical Company and Rockwell International

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-42

Deviation Request and Approval Records, 1958-1968, 1971-1973, 1978-1982, 1984 (continued)

Finding Aids: Records Storage Receipt

Disposition Authority:

1) Records schedule under revision

2) DOE (1980) C24.1

3) Records schedule under revision

4) DOE (1980) C24.1

- 5) Records schedule under revision
- 6) DOE (1980) C24.1
- 7) Records schedule under revision

- 8) DOE (1988) 3.2
- 9) Records schedule under revision
- 10) DOE (1980) C24.1
- 11) DOE (1988) 3.2
- 12) Records schedule under revision

Series Description: Deviation Request and Approval Records track weapon components and assemblies that did not meet specification requirements and went through a special approval process before receiving authorization for use. Several different forms with similar information can be found in this series. These forms have been listed below in alphabetical order.

Discrepancy Reports describe defects found in components manufactured at Rocky Flats. They include part names and numbers; shop order numbers; originating departments; operation numbers; machine groups; production operator clock numbers and shifts; inspection stations; inspection operation numbers; and quantities received, inspected, accepted, and rejected. There are also descriptions of the deviations, the causes assigned, corrective actions recommended or taken, and deviation actions.

Quality Control Disposition Cards are very similar to Discrepancy Reports and describe defects and deviations in components found during manufacture and inspection. Information on the cards consists of dates; part names and numbers; shop order numbers; originating departments; operation numbers; machine groups; production operator clock numbers and shifts; inspection stations; quantities received, inspected, and accepted; and descriptions of the defects, causes assigned, corrective actions, and deviation actions.

Request for Deviation Concurrence forms contain deviation request numbers, parts or assembly numbers, part titles, drawing numbers, specification and deviation descriptions, deviation approvals, and quantities and serial numbers of the deviated parts.

Deviation Request and Approval Records, 1958-1968, 1971-1973, 1978-1982, 1984 (continued)

Series Description (cont'd)

Request for Formal Disposition of Nonconforming Material forms were submitted whenever a deviated part needed to be accepted for use or rejected for scrap. Each form lists the part(s) and specification which was affected (e.g., part A is .0002 undersized); the deviation from the specification; use restrictions; which site was notified, including the University of California Lawrence Livermore, Sandia Livermore Laboratory, or Albuquerque Operations Office; NCMR [Nonconforming Material Request?] number; Atomic Energy Commission part number; drawing number; part type; serial or lot number; Product Engineering review signature; whether the unit was a component, assembly, or gage; and whether the unit was submitted for deviation or rejection. Attached teletype messages reiterate the request and indicate approval from Sandia or the University of California.

Specification Deviations and Specification Exception Releases (SXRs) authorized the use of components that failed to meet specification requirements. Each form provides an SXR number, drawing number and suffix, use limitations, quantity, part name, drawing requirements and variation from the drawing, marking requirements, corrective actions, agency, date, references, and remarks. Some of the forms indicate that a deviated part was rejected by Product Engineering.

For related records, see Volume IV. Deviation Approval Correspondence, 1954-1961, 1963-1966, 1973; Deviation Request Logs, 1971-1973; and Stockpile Approved Product Records (SAPRs), 1955-1993.

Data Elements: 88-89, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Deviation Request Logs, 1971-1973

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified up to Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: 1) C321; 2) D227, H220

Container Number: 1) C321; 2) D227, H220

Scanning Suitability: Series consists of bound handwritten logs.

Arrangement: By part or assembly type, thereafter chronological and numerical by deviation number

Originating Office: J-Line Engineering and Product Engineering organizations, Dow Chemical Company

Finding Aids: Records Storage Receipt

Disposition Authority: 1) Records schedule under revision; 2) DOE (1988) 3.2

Series Description: This series is comprised of logs used to track the outcome of deviation requests for parts which did not meet proper design specifications. The logs indicate dates, deviation request numbers, quantities and serial numbers of deviated parts, part names, specification numbers, and whether or not requests were accepted.

For related records, see Volume IV. Deviation Approval Correspondence, 1954-1961, 1963-1966, 1973 and Deviation Request and Approval Records, 1958-1968, 1971-1973, 1978-1982, 1984.

Data Elements: 89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 0.35 cu. ft.

Condition: Good

Medium: Paper

Duplication: Unknown

"DIPSI" Backlog Inventory Summary Reports, 1983-1984

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: D330

Condition: Fair

Volume: 0.33 cu. ft.

Container Number: D330

Scanning Suitability: Series consists of faded computer-generated reports.

Arrangement: Chronological

Originating Office: Nuclear Materials Control and Accountability Organization, Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: The computer-generated reports in this series were apparently created to track the weapon units and materials which were removed from inventories due to radioactive decay. The reports include unit serial numbers, dates, weights, activities, rounded total weights for isotopes, calculated assay amounts, and total activities for elements and isotopes in each unit. Radioactivity measurements are recorded in curies.

Data Elements: 89, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Medium: Paper

Duplication: Unknown

Drum, Crate, and Filter Summary Reports, 1983-1988

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: 1) D150, D173, D226; 2) H180; 3) H394

Container Number: 1) D150, D173, D226; 2) H180; 3) H394

Scanning Suitability: Series consists of computer-generated reports with handwritten notes.

Arrangement: Chronological

Originating Office: Nuclear Materials Control and Accountability Organization, Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: 1) Records schedule under revision; 2) DOE (1988) 5.4a(2); 3) DOE (1980) C26.4a(1)

Series Description: Drum, Crate, and Filter Summary Reports document the transfer of nuclear materials from one MBA [Material Balance Area] to another. Each report notes the transaction date, item number, total net weight in kilograms, amounts taken from and added to each MBA, IDC [Item Description Code] and project numbers, element number and weight in grams, element assay, isotope number and weight in grams, isotope assay, and total amounts for each MBA.

Data Elements: 89, 115, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 2.24 cu. ft.

Medium: Paper

Condition: Fair

Duplication: Unknown

Engineering Change Requests (ECRs), 1963-1966, 1976-1980

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: A126, A419

Container Number: A126, A419

Volume: 1.50 cu. ft.

Condition: Good to fair

Medium: Paper

Scanning Suitability: Suitable

Arrangement: Chronological

Originating Office: Product Definition and Technical Writing organizations of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: Engineering Change Requests were used by Rocky Flats product engineers to request changes to Sandia National Laboratories, Livermore and Lawrence Livermore National Laboratory drawings or procedure documents. The requests list ACO [Authorized Change Order] numbers, specifications to be changed, reasons for changes, Integrated Contractor Order numbers, reporting/effectivity requirements, incorporation instructions and material dispositions, agencies, organizations, approval signatures, and dates.

For related records, see Volume IV. Advance Change Orders (ACOs), 1968-1987 and Engineering Orders (EOs), 1978-1991.

Data Elements: 89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

.

Duplication: Unknown

Engineering Order (EO) Logs, 1978-1979, 1983-1984

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are unclassified; 881 Archives is a security-controlled area.

Volume: 0.4 cu. ft.

Accession or Other ID Number: 1) B235; 2) E338

Container Number: 1) B235; 2) E338

Scanning Suitability: Series consists of handwritten bound volumes.

Arrangement: Numerical by EO number

Originating Office: Product Definition and Product Engineering organizations, Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: 1) Records schedule under revision; 2) DOE (1980) C24.4c

Series Description: This series consists of logs used to track Engineering Orders (EOs). For each order the log indicates EO number, engineer name, job or DJO [Development Job Order] number, program designation, drawing number, "action cy.," date, and whether the EO was completed.

For related records, see Volume IV. Engineering Orders (EOs), 1978-1991.

Data Elements: 89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Condition: Fair

Medium: Paper

IV-49

Duplication: Unknown

Engineering Orders (EOs), 1978-1991

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified up to Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number.	
1) A192	
2) A237	
3) A282, A293, A302	
4) A323-A324, A369	
5) A371, B160	
6) B195	•
7) B235, B346	
8) C332	
9) E125	
10) E338-E339	
11) G007-G013, G106, G178, G181	
12) G232	
13) G361	
14) H152	
15) H161	
16) H166, H170-H171	
17) H182	
18) H192, H194	
19) H198, H216, H221, H235,	
H409	

Volume: 38.34 cu. ft.

Medium: Paper

Duplication: Unknown

Container Number: 1) A192 2) A237 3) A282, A293, A302 4) A323-A324, A369 5) A371, B160 6) B195 7) B235, B346 8) C332 9) E125 10) E338-E339 11) G007-G013, G106, G178, G181 12) G232 13) G361 14) H152 15) H161 16) H166, H170-H171 17) H182 18) H192, H194 19) H198, H216, H221, H235, H409

Condition: Good to fair

Scanning Suitability: Series consists of forms, drawings, colored paper, and handwritten data.

Arrangement: Numerical by EO number

Originating Office: Product Definition and Configuration Management, Product Engineering, Quality Engineering and Control, Technical Support, and Technical Writing organizations of Rockwell International and EG&G

Engineering Orders (EOs), 1978-1991 (continued)

Finding Aids: Records Storage Receipt

Disposition Authority:

- 1) Records schedule under revision
- 2) DOE (1988) 2.4c
- 3) DOE (1988) 3.1e
- 4) Records schedule under revision
- 5) DOE (1988) 3.1e
- 6) Records schedule under revision
- 7) DOE (1988) 3.1e
- 8) DOE (1988) 5.1e
- 9) DOE (1988) 3.1e
- 10) DOE (1980) C24.4c
- 11) DOE (1988) 3.1e

- 12) DOE (1988) 5.1e
- 13) Records schedule under revision
- 14) DOE (1988) 3.1e
- 15) DOE (1988) 5.1e
- 16) DOE (1988) 3.1e
- 17) Records schedule under revision
- 18) DOE (1988) 3.3
- 19) DOE (1988) 3.1e

Series Description: The Engineering Orders (EOs) were written by Rocky Flats product engineers to document changes in drawings and acceptance requirements for WR [War Reserve] and non-WR products. Each EO provides EO number; DJO [Development Job Order] number and suffix; program or unit type; document title; effective date; EO type (e.g., procedure, process card, special instructions, processing request, specifications or drawings, or "D/A" instruction release); a narrative description of the action to be taken; and authorizing signatures. Also included are requests for revisions to M-documents, listed on *Request for Document Change* forms, which are essentially EOs, but have the draft and final versions of documents attached and may be accompanied by drawings or diagrams.

For related records, see Volume IV. Advance Change Orders (ACOs), 1968-1987; Engineering Change Requests (ECRs), 1963-1966, 1976-1980; and Engineering Order (EO) Logs, 1978-1979, 1983-1984.

Data Elements: 88-89

Enriched Uranium Monthly Inventory Reports, 1972-1973, 1976-1978

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number. E310

Container Number: E310

Medium: Paper

Condition: Fair

Volume: 0.1 cu. ft.

Scanning Suitability: Series consists of forms.

Duplication: Unknown

Arrangement: Chronological

Originating Office: Nuclear Materials Control Organization of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series consists of monthly inventory reports which were sent to the Atomic Energy Commission and its successor agencies. The reports list element and isotope weights and total material amounts for each of the following categories: project number, status of material (i.e., usable and in storage for definite use, in a reactor, or in a critical assembly), production materials, inactive materials, and scrap materials awaiting recovery.

Data Elements: 89, 115

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Exception Weight Pre-List Reports, 1990

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: A287

Container Number. A287

Scanning Suitability: Series consists of computer-generated reports.

Arrangement: Numerical by location number

Originating Office: Nuclear Materials Accountability System Organization, EG&G

Finding Aids: Records Storage Receipt

Disposition Authority: DOE (1988) 5.4a(1)

Series Description: The reports in this series were created as part of the Confirmatory Verification Measurement Program of the Safeguards Accountability Network (SAN). The reports contain location and item numbers; "CM"; "PBA"; "STAT"; "TID" numbers; IDC [Item Description Code] numbers; analytical methods; net weights; major element numbers; "MAJ" weights and assays; and "ISO" elements, weights, and assays. Also included are worksheets which were used to verify inventory figures in the reports through statistical sampling. These forms list operator names and numbers, locations, item numbers, "TID" numbers, "SAN DATA VERIFY," and whether or not items were confirmed.

Data Elements: 8, 16, 89, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 0.25 cu. ft.

Condition: Good

Medium: Paper

Duplication: Unknown

Federal Bureau of Investigation (FBI)-Seized Records - Materials Handling, 1981-1989

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: G340

Condition: Good

Container Number: G340

Scanning Suitability: Series contains handwritten forms and microfilm.

Medium: Paper and microfilm

Volume: 0.8 cu. ft. and 3 reels

Duplication: The FBI seized the original records in 1989.

Arrangement: Numerical by document number

Originating Office: Legal Department, Rockwell International

Finding Aids: Records Storage Receipt, which includes an itemized document list.

Disposition Authority: DOE (1988) 7.9b

Series Description: This series contains microfilm, presumably of records seized by the Federal Bureau of Investigation (the microfilm could not be reviewed). Also included is an annotated index to "batches" of the records, which indicates that the series contains records relating to the plutonium recovery modification project, solvent elimination, material control activities and procedures, waste minimization goal achievement objectives, and many other relevant subjects. Also included are a supervisor's shift log, a materials packaging and shipping report, a Building 371 test team report, and residue generation summary reports.

Data Elements: 88, 115, 117, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Heat/Cold Stress Records, 1988-1989

Location: Active: RF-T452 D Inactive:

Access Restrictions: Records are unclassified; building is in an access-controlled area.

Accession or Other ID Number. None

Container Number: Series folders are interfiled with other file folders in four 5-drawer filing cabinets.

Scanning Suitability: Suitable

Volume: 0.1 cu. ft. (5 folders)

Condition: Good

Medium: Paper

Duplication: A mirror file, arranged by subject, also exists in T452D.

Arrangement: By building number, thereafter by subject

Originating Office: Industrial Hygiene Organization, Rockwell International

Finding Aids: None

Disposition Authority: Unscheduled

Series Description: The Heat/Cold Stress Records consist primarily of interoffice memoranda which document the policies and procedures followed under varying temperature extremes, including materials handling procedures and requirements for protective clothing (e.g., the requirements for gloves at 19 degrees Fahrenheit or below).

Data Elements: 3, 107

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-55

Inactive Procedures for Manufacturing Documents, 1963-1972

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: E376

Container Number: E376

Scanning Suitability: Series contains poor-quality copies.

Arrangement: Subject

Originating Office: Technical Writing Organization of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series contains a variety of inactive procedures which were used primarily to maintain control over manufacturing process documents. The records explain the responsibilities of the Technical Writing organization for maintaining the M-Documents filing scheme, for preparing procedures required to define the manufacturing processes, and for using the *Product Engineering Product Request* and *Product Change Authorization Procedures* forms.

Data Elements: 34, 88-89

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Volume: 0.2 cu. ft.

Condition: Fair

Medium: Paper

Duplication: Unknown

Inventory Balance Verification Reports, 1971-1972, 1974-1983, 1990-1991

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified up to Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: A382, C233, C284, C330, D169, D233, D249, D295, D355, D357, E143, E210, E212, E228, E235, E308-E309, G120, G251, G259, G287, G299, H308, H348, H412, H415-H416, H422

Container Number: A382, C233, C284, C330, D169, D233, D249, D295, D355, D357, E143, E210, E212, E228, E235, E308-E309, G120, G251, G259, G287, G299, H308, H348, H412, H415-H416, H422

Scanning Suitability: Series consists of bound computer-generated reports.

Volume: 14.25 cu. ft.

Condition: Good

Medium: Paper

Duplication: Unknown

Arrangement: Chronological, thereafter by facility or report type

Originating Office: Nuclear Materials Control and Accountability Organization of Dow Chemical Company, Rockwell International, and EG&G

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: Verification reports were used to track amounts of nuclear materials in various facilities onsite. The reports list facilities and facility shipping codes, RIS [Receiving Inspection Station] codes, element names and codes, major element weights, MBA [Material Balance Area] codes, book and physical inventory amounts, net inventory adjustments, and normal operational losses. The reports appear to have been generated on a monthly basis.

Data Elements: 88-89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Inventory Difference (ID) Control Data Records, 1976-1980

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: E144

Container Number: E144

Scanning Suitability: Series contains flow charts.

Arrangement: Reverse chronological

Originating Office: Nuclear Materials Control Organization, Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: The records in this series consist of internal reports and correspondence from the Nuclear Materials Control Organization to the Albuquerque Operations Office regarding unexplained nuclear material inventory differences. The records provide names of the supervisors and custodians of the MBAs [Material Balance Areas] under investigation, probable causes for missing or unaccounted for material or "out of control conditions," and the administrative actions taken after discovery of the conditions. The majority of the differences were caused by incorrect measuring procedures, equipment malfunctions, or improper storage and handling procedures.

Data Elements: 8, 28, 31, 81, 88-89, 122

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Condition: Good

Volume: 0.3 cu. ft.

Medium: Paper

Duplication: Unknown

Joining Research and Development Reports, 1957-1965, 1967

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number. D235

Container Number: D235

Volume: 0.85 cu. ft.

Condition: Good

Medium: Paper and photographs

IV-59

Duplication: Unknown

Scanning Suitability: Series contains yellow paper, graph paper, diagrams, oversized blue-prints, handwritten data, and photographs.

Arrangement: None

Originating Office: Analytical Laboratory and Joining Research and Development, Process and Materials Development, and Product Engineering organizations of Dow Chemical Company

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series consists of reports regarding the activities of the Joining Research and Development Group. Subjects covered by the reports include equatorial closures, brazing materials, departmental objectives and accomplishments, the status of projects, and future projects. Welding and materials studies included in the series contain relevant shop travelers, inspection sheets, graphs, radiographic results, and photographs.

Data Elements: 88

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Laser Isotope Separation (LIS) Program Records, 1976-1982

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number. D218-D219

Container Number: D218-D219

Condition: Good

Volume: 1.75 cu. ft.

Medium: Paper

Duplication: Unknown

Scanning Suitability: Series contains transparencies, flow charts, diagrams, and photocopies.

Arrangement: None

Originating Office: Lawrence Livermore National Laboratory; Uranium Project Group, Rockwell International; C.F. Braun & Co.

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series consists of records relating to the initiation of processes to enrich isotopes through laser separation. The program to study the effectiveness and use of these processes was a joint effort involving Los Alamos National Laboratory, Lawrence Livermore National Laboratory (LLNL), the Hanford Site, and Rocky Flats. Included in the series are engineering analyses, feasibility studies, memoranda, presentation materials, design calculations, program plans, costs estimates, budget plans, progress reports, and compatibility test results. Many of the reports were prepared by LLNL. Rocky Flats' role in this program was to supply the process components and test the end products. Subjects relating to the plant include metal processing and handling, support systems, scheduling, and space requirements. Floor plans for Building 371 and process flow charts are included.

For related records, see Volume III. Laser Isotope Separation (LIS) Purchasing and Engineering Records, 1984-1985.

Data Elements: 3, 88-89, 117

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Material Certification Coding Records, 1958-1960

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: C361

Container Number: C361

Scanning Suitability: Series contains forms, colored paper, and handwritten data.

Arrangement: Chronological

Originating Office: Final Quality Acceptance and Certification Organization, Dow Chemical Company

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series contains pages of coding data used to document changes and updates made to the Material Certification Listings. The documents provide coding information about components, including change numbers, descriptions of changes, page counts, authorizing signatures, and indicator codes for such characteristics as broken edges.

Data Elements: 89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 0.08 cu. ft.

Condition: Good

Medium: Paper

Duplication: Unknown

Materials Inventory Breakdown Reports, 1963-1964

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: C214

Container Number: C214

Scanning Suitability: Series consists of tables.

Arrangement: Reverse chronological by month

Originating Office: Statistics and Nuclear Materials Control Organization, Dow Chemical Company

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series consists of two types of reports documenting the amounts of nuclear materials stored at Rocky Flats. Summary reports list, by building or miscellaneous area, the total weight in kilograms of various nuclear materials, including enriched uranium, plutonium, and normal uranium. Reports titled Detail of Production Credits expand upon information in the summary reports. The reports provide part numbers, gross number of parts shipped, number of rejects, and net number and weight of parts shipped for each building or area.

Data Elements: 89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 0.2 cu. ft.

Condition: Good

Medium: Paper

Duplication: Unknown

Materials Inventory Ledgers, 1964-1965

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: A221

Container Number: A221

Medium: Paper

Condition: Fair

Scanning Suitability: Suitable

Duplication: Unknown

Arrangement: Ledgers are by material type, entries are chronological.

Originating Office: Dow Chemical Company

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: These ledgers track inventory amounts of plutonium, plutonium-238, enriched uranium, uranium-233, deuterium-38, normal uranium, deuterium, lithium, neptunium-237, thorium, and tritium. Amounts were recorded for the beginning inventories of each month, materials sent and received, ending inventories, shipments, fiscal years, and shipper-receiver differences.

Data Elements: 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 0.5 cu. ft.

Materials Missing or Unaccounted For (MUF) Summary Reports, 1971-1974, 1977

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified up to Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: C169, E144, E229

Container Number: C169, E144, E229

Scanning Suitability: Series contains graphs and computer-generated reports.

Arrangement: Chronological

Originating Office: Nuclear Materials Control Organization of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series of summary reports documents the amounts of materials missing or unaccounted for at the end of each month from Rocky Flats laboratories, departments, or materials accounts. Each area or account name, number, and amount for the month are provided. Additionally, amounts are plotted in graph form for the previous three years. Other summary information is provided for each area but could not be interpreted.

Data Elements: 88-89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 1.3 cu. ft.

Condition: Good to fair

Medium: Paper

Duplication: Unknown

Measurement Control Task Force Meeting Minutes, 1974-1981

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: E144

Container Number: E144

Scanning Suitability: Suitable

Arrangement: Reverse chronological

Originating Office: Measurement Control Task Force of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: These are the monthly meeting minutes of the Measurement Control Task Force, which was comprised of employees from Nuclear Materials Control, Statistics and Systems Analysis, "SL&IM," CSL [Chemistry Standards Laboratory], Instrumentation and Statistical Systems, Chemical Operations, Process Engineering, and other organizations. The task force addressed numerous subjects, including inventory verification, reconciliation of Rocky Flats and Mound Site inventories after materials transfers, procedural updates, inventory measurement procedures pertaining to specific elements and materials, and similar materials tracking issues.

Data Elements: 89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Condition: Good

Volume: 0.3 cu. ft.

Medium: Paper

Duplication: Unknown

Metal Assay and Sampling Results, 1967-1988

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified up to Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: A177, D194, D213, D260-D261, D263, D294, E157-E159, E252, E254, E280-E284, E293, E312, G113, G150, G154-G157, G164, G188, G190, G196-G197, G199, G380, SWV53

Container Number: A177, D194, D213, D260-D261, D263, D294, E157-E159, E252, E254, E280-E284, E293, E312, G113, G150, G154-G157, G164, G188, G190, G196-G197, G199, G380, SWV53

Scanning Suitability: Series consists of forms, computer-generated reports, graphs, and handwritten data.

Arrangement: By test or sample type, thereafter chronological

Originating Office: Analytical, General, Plutonium Spectroscopy, and Production Support laboratories and the Quality Engineering and Control Organization of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 27.60 cu. ft.

Condition: Good to fair

Medium: Paper

Duplication: Unknown

Metal Assay and Sampling Results, 1967-1988 (continued)

Series Description: This series consists of sample test results which appear to be testing various production metals (e.g., plutonium or uranium) or components for impurities prior to or during manufacturing operations. Each test report contains the technician's name and employee number; the type of test being conducted (e.g., fluorometry or spectroscopy); building where the test occurred; requisition number; "OD/Vol."; weight in grams or volume of the sample; parts per million/average; and amounts of various impurities, including silver, beryllium, calcium, cadmium, cobalt, chromium, iron, gallium, nickel, tantalum, tungsten, and zirconium, usually given in parts per million or percentages.

Data Elements: 88-89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Monthly Production and Defect Charts, 1971-1979, 1981-1983

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: E116-E121, E167-E169

Container Number: E116-E121, E167-E169

Scanning Suitability: Series consists of computer-generated reports.

Arrangement: Chronological

Originating Office: Quality Engineering Systems and Plans Organization of Dow Chemical Company and Rockwell International

Finding Aids: Record Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: These reports appear to be tabulations of weekly production percent yields, with notations for contributing factors to defects, process numbers, defect cost estimates, and primary reasons for defects.

Data Elements: 89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-68

Volume: 9 cu. ft.

Condition: Good

Medium: Paper

Duplication: Unknown

Non-Destructive Assay Systems Results, 1984

Location: Active:

Inactive: RF-DOE Safety and Health Division Library, Building 116

Access Restrictions: Records are unclassified; building is in an access-controlled area.

Accession or Other ID Number. None

Container Number: None

Volume: 0.1 cu. ft.

Condition: Good

Medium: Paper

Scanning Suitability: Series contains tables.

Duplication: Unknown

Arrangement: None

Originating Office: Rockwell International

Finding Aids: DOE Records Management maintains a shelf inventory list.

Disposition Authority: Designated for periodic review by DOE Records Management.

Series Description: This series consists of what appears to be measurements of plutonium found in various samples. Sections are labeled "Low Resolution Gamma Systems," "Neutron Assay Systems," and "Appendix." Data in the sections include sample names and locations, assay times, percentage measurements of accuracy, and descriptions of assay results.

Data Elements: 77, 103, 124

Non-Nuclear Materials Inventory Control Records, 1975-1978

Access Restrictions: Records are unclassified; 881 Archives is a security-controlled area.

Accession or Other ID Number: 1) SWV94; 2) SWV122

Container Number: 1) SWV94; 2) SWV122

Scanning Suitability: Series contains poorquality mimeographs.

Arrangement: 1) None; 2) By type of product

Originating Office: Production Control Organization, Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: DOE (1988) 3.3

Series Description: This series documents the production of non-nuclear weapon components in Building 881. The records include production orders for oxide cans, hinge eyes, handles, studs, filling fittings, locating pins, and latches. Also included are material transfer receipts which indicate that the components were shipped to Buildings 371 and 444.

Data Elements: 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-70

Volume: 2 cu. ft.

Condition: Fair

Medium: Paper

Duplication: Unknown

Location: Active: Inactive: RF-881 Archives, Room 214

Non-Plutonium Inventory Worksheets, 1973-1978

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: D212

Container Number: D212

Scanning Suitability: Series contains handwritten data.

Arrangement: Chronological

Originating Office: Nuclear Materials Control Organization of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: The worksheets in this series were created to satisfy the Nuclear Materials Control Organization's requirement that all non-plutonium materials be inventoried. This includes such materials as californium and uranium-235. The worksheets record beginning inventory amounts, offsite receipts, offsite removals, measured discards, normal operational losses, unadjusted and adjusted balances, missing or unaccounted for amounts, and the total adjusted ending inventory for each reporting period.

Data Elements: 89, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 0.4 cu. ft.

Condition: Good

Medium: Paper

Duplication: Unknown

Normal Operational Loss (NOL) Records, 1974-1981

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: E142-E143, E229-E230, E310

Container Number: E142-E143, E229-E230, E310

Scanning Suitability: Series contains oversized computer-generated reports.

Arrangement: Chronological

Originating Office: Nuclear Materials Control Organization of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series contains documentation for nuclear materials which were removed from the site inventory due to normal operational losses. Authorizations for material removal and computer-generated reports note changes in the inventory. Materials could be removed from the inventory for special research projects and programs or because they could not be economically recovered from waste solutions, residues, or contaminated equipment. Data found in the records include MBA [Material Balance Area] codes, discard dates, IDCs [Item Description Codes], plutonium and americium assays in grams per liter, amounts of plutonium and americium discarded in percentages, and authorizing signatures.

Data Elements: 89, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 1.15 cu. ft.

Condition: Good to fair

Medium: Paper

Duplication: Unknown

Nuclear Materials Accounts Balance Worksheets, ca. 1968-1970

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are unclassified; 881 Archives is a security-controlled area.

Accession or Other ID Number: C309

Container Number: C309

Volume: 0.2 cu. ft.

Condition: Fair

Medium: Paper

Duplication: Unknown

Scanning Suitability: Series consists of colored graph paper with handwritten data.

Arrangement: By account

Originating Office: Nuclear Materials Control Organization, Dow Chemical Company

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: The Nuclear Materials Accounts Balance Worksheets document changes in nuclear materials inventory amounts for accounts that Rocky Flats had with other Department of Energy facilities, such as Savannah River and Hanford. The balance sheets provide the item numbers and corresponding amounts added to, or subtracted from, each account. Shipper-Receiver Difference Reports, also in the series, reconcile discrepancies between amounts shipped and received. These reports include shipper and receiver item numbers and canned weights; receiver item weights, element weights, element in oxide weights, and total elements received; shipper element weights; and shipper/receiver element weight differences.

Data Elements: 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Nuclear Materials Analysis Accountability Records, 1973-1974, 1979, 1982-1984, 1986-1987

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified up to Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: E114, E294, E312, G188, G190, G219, SWV83

Container Number: E114, E294, E312, G188, G190, G219, SWV83

Scanning Suitability: Series contains halfpage forms and computer-generated reports.

Arrangement: Numerical by requisition number

Originating Office: Analytical Laboratory of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series consists of requisition forms used to document information about nuclear material samples sent to the Analytical Laboratory for testing. The forms track the materials as they were transferred to the laboratory from other site areas and include the location where the samples were analyzed and the types of tests requested for each sample. Each form notes a date, to and from accountability areas, operator number, cost account number, name and location of person making the request, name of the person to whom the sample request was sent, sample type, cast number, vial number, receiver weight, measurement unit of the test to be performed (usually in parts per million), and laboratory remarks.

Data Elements: 8, 28, 31, 89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 5.25 cu. ft.

Condition: Good to fair

Medium: Paper

Duplication: Unknown

Nuclear Materials Control and Accountability Material Receipts, 1971-1974, 1978-1983

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number. 1) C161; 2) C218, D232, D256, D305

Container Number: 1) C161; 2) C218, D232, D256, D305

Scanning Suitability: Series consists of forms and colored paper.

Arrangement: Reverse chronological

Originating Office: Nuclear Materials Control and Accountability Organization of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: 1) DOE (1988) 5.4a(1); 2) Records schedule under revision

Series Description: Nuclear Materials Control and Accountability Material Receipts were used to document the daily receipt of nuclear materials, presumably from offsite sources. The forms provide the shipper and receiver MBA [Material Balance Area] codes, shipping document codes, dates, part or container types and serial numbers, major and alloy element codes, item description codes, major element and isotopic weights, and alloy and isotopic weights.

Data Elements: 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 2.05 cu. ft.

Condition: Good

Medium: Paper

Duplication: Unknown

Nuclear Materials Control Four-Part General Ledgers, 1974-1978, 1980-1993

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number. 1) A287, A308-A310, A381, B145, B149, B157, B178, B201, B225 2) B227 3) B333 4) B343 5) C099, C104-C105, C108, C172, C174 6) C213, C228, C233, C254, C261, C273 7) C282 8) C284 9) C315 10) C316-C317 11) C318 12) C331, C368, C375, D109, D111, D131, D145, D150, D161, D169, D172 13) D177 14) D180, D185, D189, D199, D203, D215, D225, D228, D233, D249, D253, D258, D308, D322, D354, D356-D357, D362, D369-D370 15) E139 16) E211, E215, E220, E225, E227-E228, E231 17) E242, E257 18) E301-E307, E310 19) G016 20) G020 21) G222, G239 22) G255, G261, G273-G274. G279, G287, G305 23) G338, G358

Volume: 87.64 cu. ft.

Container Number 1) A287, A308-A310, A381, B145, B149, B157, B178, B201, B225 2) B227 3) B333 4) **B**343 5) C099, C104-C105, C108, C172, C174 6) C213, C228, C233, C254, C261, C273 7) C282 8) C284 9) C315 10) C316-C317 11) C318 12) C331, C368, C375, D109, D111, D131, D145, D150, D161, D169, D172 13) D177 14) D180, D185, D189, D199, D203, D215, D225, D228, D233, D249, D253, D258, D308, D322, D354, D356-D357, D362, D369-D370 15) E139 16) E211, E215, E220, E225, E227-E228, E231 17) E242, E257 18) E301-E307, E310 19) G016 20) G020 21) G222, G239 22) G255, G261, G273-G274, G279, G287, G305 23) G338, G358

Nuclear Materials Control Four-Part General Ledgers, 1974-1978, 1980-1993 (continued)

Accession or Other ID Number (cont'd)	Container Number (cont'd)
24) G369	24) G369
25) G375	25) G375
26) G378-G379	26) G378-G379
27) H162	27) H162
28) H222	28) H222
29) H243	29) H243
30) H253	30) H253
31) H291	31) H291
32) H307	32) H307
33) H308, H364	33) H308, H364
34) H376, H396	34) H376, H396
35) H412	35) H412
36) H413	36) H413
37) H415-H416, H422	37) H415-H416, H422

Condition: Good to fair

Scanning Suitability: Series consists of oversized, faded, computer-generated reports.

Duplication: Unknown

Medium: Paper

Arrangement: Chronological by month

Originating Office: Nuclear Materials Control and Accountability Organization of Dow Chemical Company, Rockwell International, and EG&G

Finding Aids: Records Storage Receipt

Disposition Authority:

- 1) Records schedule under revision
- 2) DOE (1988) 5.4a(1-2)
- 3) Records schedule under revision
- 4) DOE (1988) 5.4a(2)
- 5) DOE (1988) 5.4a(1)

- 6) Records schedule under revision
- 7) DOE (1988) 5.4a(2)
- 8) Records schedule under revision
- 9) DOE (1988) 5.4a(1)
- 10) Records schedule under revision

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Nuclear Materials Control Four-Part General Ledgers, 1974-1978, 1980-1993 (continued)

Disposition Authority:

11) DOE (1988) 5.4a(1)

- 12) Records schedule under revision
- 13) DOE (1988) 5.4a(2)
- 14) Records schedule under revision
- 15) DOE (1988) 5.4a(2)
- 16) Records schedule under revision
- 17) DOE (1988) 5.4a(1)
- 18) Records schedule under revision
- 19) DOE (1988) 5.4a(1-2)
- 20) Records schedule under revision
- 21) DOE (1980) C26.4a(1)

22) Records schedule under revision

- 23) DOE (1980) C26.4a(1)
- 24) Records schedule under revision

- 25) DOE (1980) C26.4a(1)
- 26) Records schedule under revision
- 27) DOE (1988) 5.4a(1)
- 28) DOE (1980) C26.4a(1)
- 29) DOE (1988) 5.4a(1)
- 30) Records schedule under revision
- 31) DOE (1988) 5.4a(1)
- 32) DOE (1980) C26.4a(1)
- 33) Records schedule under revision
- 34) DOE (1980) C26.4a(1)
- 35) Records schedule under revision
- 36) DOE (1980) C26.4a(1)
- 37) Records schedule under revision

Series Description: This series consists of four-part general ledgers which track the inventory of various nuclear and controlled materials maintained onsite. The ledgers are divided according to the manner in which data in the tracking system were sorted. Three of the four parts are the physical inventory, arranged by Item Description Code (IDC), Project Status Code, and Material Balance Area (MBA). These parts list the amounts of nuclear or controlled materials on hand and also include element names, numbers, and weights; IDCs; Physical Status Codes; and MBAs where elements were located. The fourth part is a general ledger which documents changes in total inventory amounts for each month. It lists the RIS [Receiving Inspection Station]/MBA code, element number, beginning inventory weight, onsite and offsite receipt weights, onsite and offsite shipment weights, book and physical inventory weights, and inventory difference weight for each element in the RIS/MBAs. Weights are presumably noted in grams.

Data Elements: 89, 120

Nuclear Materials Control Records, 1954-1963, 1969-1971

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: C212, C308

Condition: Good

Volume: 2 cu. ft.

Container Number: C212, C308

Scanning Suitability: Suitable

Medium: Paper

Duplication: Some records are available on microfilm in the 881 Archives under MF-RF-NMC, Reel 5.

Arrangement: None

Originating Office: Statistics and Nuclear Materials Control Organization, Dow Chemical Company

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series consists of records relating to the handling and storage of nuclear materials. The records contain correspondence; progress and cost reports; procedures manuals; reports of, and explanations for, "book physical inventory differences" [missing plutonium]; and drum counter lists. Accession Number C308 contains records created after the May 1969 fire in Building 776, which note the dates, serial numbers, and weight in grams for each plutonium component removed from the fire site. Also included is an organizational chart for the Decontamination Group.

Data Elements: 1, 89, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-79

Nuclear Materials Inventory Summary Reports, 1969, 1974-1994

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified up to Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number. 1) A116 2) A188, A283 3) A287 4) A291, A301 5) A304, A306, A311-A313, A317 6) A375 7) A401 8) B127-B128 9) B149, B151-B152, B155, B237 10) B242 11) B261 12) B268, B271, B296, B333 13) B340 14) B368 15) **B**381 16) C101 17) C102-103 18) C109, C129-130 19) C228, C233, C263 20) C282 21) C287-C289 22) C306, C311 23) C344 24) C345, C358, C362, C365 25) C371 26) C377, C379, C383, D109, D111 27) D121 28) D127, D147 29) D149 30) D151, D161 31) D166-D167 32) D168, D173 33) D176 34) D178

Volume: 147.52 cu. ft.

Container Number. 1) A116 2) A188, A283 3) A287 4) A291, A301 5) A304, A306, A311-A313, A317 6) A375 7) A401 8) B127-B128 9) B149, B151-B152, B155, B237 10) B242 11) B261 12) B268, B271, B296, B333 13) B340 14) B368 15) B381 16) C101 17) C102-103 18) C109, C129-130 19) C228, C233, C263 20) C282 21) C287-C289 22) C306, C311 23) C344 24) C345, C358, C362, C365 25) C371 26) C377, C379, C383, D109, D111 27) D121 28) D127, D147 29) D149 30) D151, D161 31) D166-D167 32) D168, D173 33) D176 34) D178

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Nuclear Materials Inventory Summary Reports, 1969, 1974-1994 (continued)

Accession or Other ID Number (cont'd) 35) D179 36) D180, D189, D195, D199, D203, D214-D215, D224, D228-D229, D232, D239, D251-D252, D255, D264-D267 37) D270 38) D293, D295-D296 39) D298 40) D304, D306, D318, D330, D340, D354, D361, D363-D364, D381, E106 41) E115 42) E123-E124 43) E147 44) E177 45) E185 46) E210, E213, E218, E221, E226, E230, E232, E240, E243 47) E285 48) E297, E309 49) E324 50) E326 51) E337 52) E365 53) E367-E368 54) E372 55) E382, E385, G030 56) G032-G034, G036 57) G121 58) G145, G187, G226 59) G234, G238, G240, G243 60) G251, G253, G260-G261, G263, G274, G279, G303-G305, G313, G329, G345, G359 61) G366 62) G371, G373 63) H144 64) H146, H163, H179-H180 65) H183 66) H243, H253 67) H274

Container Number (cont'd) 35) D179 36) D180, D189, D195, D199, D203, D214-D215, D224, D228-D229, D232, D239, D251-D252, D255, D264-D267 37) D270 38) D293, D295-D296 39) D298 40) D304, D306, D318, D330, D340, D354, D361, D363-D364, D381, E106 41) E115 42) E123-E124 43) E147 44) E177 45) E185 46) E210, E213, E218, E221, E226, E230, E232, E240, E243 47) E285 48) E297, E309 49) E324 50) E326 51) E337 52) E365 53) E367-E368 54) E372 55) E382, E385, G030 56) G032-G034, G036 57) G121 58) G145, G187, G226 59) G234, G238, G240, G243 60) G251, G253, G260-G261, G263, G274, G279, G303-G305, G313, G329, G345, G359 61) G366 62) G371, G373 63) H144 64) H146, H163, H179-H180

- 65) H183
- 66) H243, H253
- 67) H274

Nuclear Materials Inventory Summary Reports, 1969, 1974-1994 (continued)

Accession or Other ID Number (cont'd) 68) H294-H295 69) H297 70) H298-H299 71) H303 72) H307 73) H308 74) H328, H364, H375 75) H377-H381 *Container Number* (cont'd) 68) H294-H295 69) H297 70) H298-H299 71) H303 72) H307 73) H308 74) H328, H364, H375

75) H377-H381

Condition: Good to fair

Medium: Paper

Scanning Suitability: Series consists of oversized computer-generated reports.

Duplication: Accession C306 is available on microfilm in the 881 Archive under MF-RF-NMC, Reels 1 and 2.

Arrangement: Chronological, thereafter by Material Balance Area, inventory, or part number

Originating Office: Nuclear Material Accounting, Nuclear Materials Accountability Systems, Nuclear Materials Control, Nuclear Materials Control and Accountability, and Safeguards Accountability Network organizations of Dow Chemical Company, Rockwell International, and EG&G

Finding Aids: Records Storage Receipt

Disposition Authority:

- 1) Records schedule under revision
- 2) DOE (1988) 5.4a(2)
- 3) DOE (1988) 5.4a(1)
- 4) DOE (1988) 5.4a(2)
- 5) Records schedule under revision
- 6) DOE (1988) 5.4a(1)
- 7) DOE (1988) 5.4a(2)
- 8) DOE (1988) 5.4a(1)
- 9) Records schedule under revision

- 10) DOE (1988) 5.4a(2) 11) DOE (1988) 5.4a(1)
- 12) Records schedule under revision
- 13) DOE (1988) 5.4a(2)
- 14) Records schedule under revision
- 15) DOE (1988) 5.4a(2)

16) Records schedule under revision

- 17) DOE (1988) 5.4a(1)
- 18) DOE (1980) C26.4a(1)

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Nuclear Materials Inventory Summary Reports, 1969, 1974-1994 (continued)

Disposition Authority (continued) 19) Records schedule under revision 20) DOE (1988) 5.4a(2) 21) DOE (1980) C26.4a(1) 22) Records schedule under revision 23) DOE (1980) C26.4a(1) 24) Records schedule under revision 25) DOE (1988) 5.4a(2) 26) Records schedule under revision 27) DOE (1988) 5.4a(2) 28) Records schedule under revision 29) DOE (1988) 5.4a(2) 30) Records schedule under revision 31) DOE (1988) 5.4a(1) 32) Records schedule under revision 33) DOE (1988) 5.4a(2) 34) Records schedule under revision 35) DOE (1988) 5.4a(2) 36) Records schedule under revision 37) DOE (1988) 5.4a(2) 38) Records schedule under revision 39) DOE (1988) 5.4b(2) 40) Records schedule under revision 41) DOE (1988) 5.4a(1) 42) Records schedule under revision 43) DOE (1988) 5.4a(2) 44) DOE (1980) C26.4a(1) 45) DOE (1988) 5.4a(1) 46) Records schedule under revision 47) DOE (1988) 5.4a(2)

- 48) DOE (1988) 5.4a(1) 49) DOE (1988) 5.4a(2) 50) DOE (1988) 5.4a(1) 51) DOE (1988) 5.4a(2) 52) DOE (1988) 5.4a(1) 53) DOE (1988) 5.4a(2) 54) Records schedule under revision 55) DOE (1988) 5.4a(2) 56) DOE (1988) 5.4a(1) 57) DOE (1988) 5.4a(2) 58) DOE (1988) 5.4a(1) 59) DOE (1980) C26.4a(1) 60) Records schedule under revision 61) DOE (1980) C26.4a(1) 62) Records schedule under revision 63) DOE (1980) C26.4a(1) 64) DOE (1988) 5.4a(1) 65) DOE (1988) 5.4a(1) 66) DOE (1988) 5.4a(1) 67) Records schedule under revision 68) DOE (1988) 5.4a(1) 69) DOE (1980) C26.4a(1) 70) Records schedule under revision 71) DOE (1988) 5.4a(1) 72) Records schedule under revision 73) DOE (1980) C26.4a(1) 74) Records schedule under revision
 - 75) DOE (1988) 5.4a(1)

Series Description: The inventory summary reports in this series were generated on a monthly basis to track and account for all nuclear materials in the SAN [Safeguards Accountability Network] inventory. The reports were sorted by either Material Balance Area (MBA) code, Item Description Code (IDC), or part number. The reports list MBA codes, IDCs, item/unit numbers, item component numbers, type codes, net weights, project codes, and element numbers and weights.

Data Elements: 89, 115, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Nuclear Materials Management Forecasting and Planning Records, 1970-1985

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified up to Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: A177, C107, E122-E123, E142-E145

Container Number: A177, C107, E122-E123, E142-E145

Scanning Suitability: Series contains tables, graphs, oversized computer-generated reports, ledger paper, forms, and handwritten data. •

Duplication: Unknown

Medium: Paper

Arrangement: Varies; chronological by fiscal year or numerical by Control Document number

Originating Office: Management Systems, Nuclear Materials Control, and Nuclear Materials Control and Accountability organizations of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series consists of reports and worksheets which were used to forecast usage of, and justify management plans for, nuclear materials into the twenty-first century. The records include project or program names, reporting organization names, beginning inventory amounts, amounts transferred in and out of programs, anticipated inventory amounts for the coming years, special considerations or requirements for individual materials or programs, budgetary considerations based on usage forecasts, production forecasts, and related information.

Data Elements: 88-89, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

IV-84

Volume: 2.68 cu. ft.

Condition: Good to fair

Nuclear Materials Management Safeguards System (NMMSS) Balance Reports, 1982-1987

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: C157, C161, C167, C173, E310, H406

Container Number. C157, C161, C167, C173, E310, H406

Scanning Suitability: Series consists of computer-generated reports.

Arrangement: Chronological by month

Originating Office: Nuclear Materials Control and Accountability Organization, Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series consists of balance reports generated by the NMMSS [Nuclear Materials Management Safeguards System] to document the shipment and receipt of nuclear materials by Rocky Flats. The reports provide the same information sorted in several ways. Monthly Project Material Balance Reports, Transfer of Material--Receipts/Shipments, Other Removals, and Report of Ending Inventory reports provide project numbers, RIS [Receiving Inspection Station] codes, transaction numbers, element and isotope weights in kilograms, beginning inventory, additions to or subtractions from the inventory, normal operational losses, ending inventory, shipper and receiver names, reasons materials were removed from the inventory, and names of materials awaiting recovery.

Data Elements: 89, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 2.75 cu. ft.

Condition: Good

Medium: Paper

Duplication: Unknown

Nuclear Materials Management Safeguards System (NMMSS) Journals, 1977-1988

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: 1) A382, C107, C123, D143, D148, D238, D305, E122; 2) H193; 3) H396

Container Number: 1) A382, C107, C123, D143, D148, D238, D305, E122; 2) H193; 3) H396

Scanning Suitability: Series contains computergenerated reports, forms, and handwritten data. Duplication: Unknown

Medium: Paper

Arrangement: Varies; chronological or numerical by project or element number

Originating Office: Nuclear Materials Accounting, Nuclear Materials Control, and Nuclear Materials Control and Accountability organizations of Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: 1) Records schedule under revision; 2) DOE (1988) 5.4a(1); 3) DOE (1980) C26.4a(1)

Series Description: The journals in this series consist primarily of two types of worksheets used to document the internal transfer of nuclear materials. These worksheets apparently were used to compile transfer data into a single source before the data were entered into the NMMSS [Nuclear Materials Management Safeguards System]. The two forms, Internal Project Transfers and Nuclear Material Transaction Journal, essentially provide the same information, including shipper and receiver RIS [Receiving Inspection Station] codes, internal transaction and contract numbers, action dates, shipper/receiver project numbers, element weights, weight percentages of isotopes, isotope weights, and transportation and packaging data. The series also contains two other types of forms: SACNET [Secure Automatic Communications Network] System Data Transmission Requests and COEI [Composition of Ending Inventory] Printouts, which also provide similar information, although this could not be definitely determined as the forms do not have identifiers.

Data Elements: 89, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 6.7 cu. ft.

Condition: Good to fair

Nuclear Materials Management Shipment Records, 1973-1975, 1978, 1980-1988

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: 1) A316, A385-A386, C218, D171, D190, G254; 2) H162; 3) H270, H272, H406

Container Number: 1) A316, A385-A386, C218, D171, D190, G254; 2) H162; 3) H270, H272, H406

Scanning Suitability: Series contains computer-generated reports.

Volume: 8.71 cu. ft.

Condition: Good to fair

Medium: Paper

Duplication: Unknown

Arrangement: By shipment or receipt, thereafter chronological

Originating Office: Nuclear Materials Accounting, Nuclear Materials Control, Nuclear Materials Control and Accountability, Safeguards Accountability Network, and Statistics and Nuclear Materials Control organizations of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: 1) Records schedule under revision; 2) DOE (1988) 5.4a(1); 3) Records schedule under revision

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Nuclear Materials Management Shipment Records, 1973-1975, 1978, 1980-1988 (continued)

Series Description: This series consists primarily of computer-generated reports which document the shipment and receipt of nuclear materials between Rocky Flats and other Department of Energy facilities. Both shipment and receipt reports provide the facility or onsite MBA [Material Balance Area] codes for shippers and receivers, unit and part numbers, container numbers, item net weights, percentages of plutonium-240, primary element numbers, element assays and weights, and assays and weights of other primary elements in the material.

For related records, see Volume IV. Nuclear Materials Shipment Logs, 1964-1972, ca. 1981-1982; Nuclear Materials Shipment Memoranda, 1974, 1981-1985, 1988-1991; and Nuclear Materials Shipment Summary Reports, 1981-1982, 1984, 1986-1994.

Data Elements: 89, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Nuclear Materials Management Summary Reports, 1974-1978, 1980-1982

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number.

 C214, C260, C263, C289, C328, C374, C376, C382, D255, D293, D297, D340, D359, D363-D364, E214, E216, E224, E229, E236-E237, G253, G263, G275, G297, G301, G322, G339, G367
 H193
 H273, H309, H328, H411, H413

Condition: Good

Scanning Suitability: Series consists of computer-generated reports.

Volume: 30.41 cu. ft.

Container Number.

- C214, C260, C263, C289, C328, C374, C376, C382, D255, D293, D297, D340, D359, D363-D364, E214, E216, E224, E229, E236-E237, G253, G263, G275, G297, G301, G322, G339, G367
 H193
- 3) H273, H309, H328, H411, H413

Medium: Paper

Duplication: Unknown

Arrangement: Chronological by month, thereafter by MBA number

Originating Office: Nuclear Materials Control Organization of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: 1) Records schedule under revision; 2) DOE (1988) 5.4a(1); 3) Records schedule under revision

Series Description: This series consists of computer-generated reports, titled Transaction by Material Balance Area (MBA), which track the movement of nuclear materials among onsite MBAs. The reports list function numbers; "Jour"; document numbers; major, first, second, and third element numbers; major element net weights; and first, second, and third alloy net weights for each MBA.

Data Elements: 89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-89

Nuclear Materials Monthly Inventory Status Reports, 1963-1964, 1978-1980, 1983, 1989

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: A382, A386, D097, D172, D258, H262

Container Number: A382, A386, D097, D172, D258, H262

Scanning Suitability: Series consists of computer-generated reports and handwritten data.

Arrangement: Chronological by month

Originating Office: Nuclear Materials Control and Accountability Organization of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series consists of computer-generated monthly reports of changes in the nuclear materials inventory. The reports indicate a reporting period, RIS [Receiving Inspection Station] codes, material names and numbers, element and isotope weights, beginning inventories for agency-owned materials, materials received by Rocky Flats and shipped to other named facilities, inventory differences, and ending agency inventories. The reports are further broken down by "summary," "receipts," and "removals" to distinguish the transfer of materials between facilities.

Data Elements: 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 2.74 cu. ft.

Condition: Good to fair

Medium: Paper

Duplication: Unknown

Nuclear Materials Safeguards Accountability Network (SAN) Balance Worksheets, 1983-1986

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: C129-C130, C334, G359, H146, H295

Container Number: C129-C130, C334, G359, H146, H295

Scanning Suitability: Series consists of forms.

Arrangement: Chronological, thereafter numerical by MBA

Originating Office: Nuclear Materials Control and Accountability Organization, Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: DOE (1980) C26.4a(1)

Series Description: The NMC [Nuclear Materials Control] representative and the Material Balance Area (MBA) custodian used these worksheets to reconcile the book inventory and actual physical inventory weights of nuclear materials. The worksheets include MBA codes; element numbers; beginning inventory weights; onsite and offsite receipt and shipment weights; physical and book inventory weights; and inventory difference weights for each element in the MBAs.

Data Elements: 89, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 1.9 cu. ft.

Condition: Good to fair

Medium: Paper

Duplication: Unknown

Nuclear Materials Safety Limit (NMSL) Requests, 1977-1989

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: 1) A114; 2) A336

Container Number: 1) A114; 2) A336

Scanning Suitability: Series contains forms, colored paper, and handwritten data.

Arrangement: Reverse numerical by NMSL number

Originating Office: Criticality Engineering, Nuclear and Facilities Safety, and Nuclear Products Engineering organizations of Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: 1) Records schedule under revision; 2) DOE (1988) 1.5b(1)

Series Description: Nuclear Materials Safety Limit forms document requests for changes to operations resulting in revisions to safety standards for workers and storage, transport, machining, and assembly operations. The request forms include approval signatures from the Health Physics and Fire Safety organizations; dates of requests; building and room numbers; dates by which approval was needed; detailed narratives of the proposed operations or operation revisions; assembly and component drawing numbers; sources of materials; machining, processing, and inspection locations; and storage area locations.

Data Elements: 89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 2 cu. ft.

Condition: Good to fair

Medium: Paper

Duplication: Unknown

Location: Active:

Nuclear Materials Shipment Logs, 1964-1972, ca. 1981-1982

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: A120, C228, E129

Container Number: A120, C228, E129

Scanning Suitability: Series consists of handwritten bound volumes.

Arrangement: Chronological and numerical by part serial number

Originating Office: Nuclear and Facilities Safety, Nuclear Materials Control, and Production Control organizations of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: Shipment logs were used to track shipments of nuclear materials to and from the site. The logs include shipment memoranda and numbers; *Nuclear Materials Transaction Report* (Form 741) numbers; amounts of plutonium, enriched uranium, depleted uranium, or other materials shipped; dates of shipments; destinations; packaging materials; and part serial numbers. More recent logs also indicate when the data were posted to the Nuclear Materials Management Safeguards System.

For related records, see Volume IV. Nuclear Materials Management Shipment Records, 1973-1975, 1978, 1980-1988; Nuclear Materials Shipment Memoranda, 1974, 1981-1985, 1988-1991; Nuclear Materials Shipment Summary Reports, 1981-1982, 1984, 1986-1994; and Nuclear Materials Transaction Reports, 1961-1989.

Data Elements: 89, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 1.26 cu. ft.

Condition: Good to fair

Medium: Paper

Duplication: Unknown

Nuclear Materials Shipment Memoranda, 1974, 1981-1985, 1988-1991

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: A307, A315, A382, B134, C167, C173, C175, D223, D267, G327

Container Number: A307, A315, A382, B134, C167, C173, C175, D223, D267, G327

Scanning Suitability: Series contains forms and colored paper and inks.

Duplication: Unknown

Medium: Paper

Condition: Good to fair

Arrangement: Chronological, thereafter numerical by memorandum number

Originating Office: Nuclear Materials Accounting, Nuclear Materials Control, and Nuclear Materials Control and Accountability organizations of Dow Chemical Company, Rockwell International, and EG&G

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series contains carbon copies of memoranda which were created to accompany materials sent from Rocky Flats to other Department of Energy facilities. The forms contain shipper and recipient addresses, material classification levels, freight codes, dates shipped, MBA [Material Balance Area] codes, container serial numbers and sizes, gross weights, item types and serial numbers, Department of Transportation permit numbers, radiation group numbers, radiation levels in curies, surface contamination levels in c/m or mrem/hr [counts per minute or millirems per hour], radiation levels at one meter away in mrem/hr, and authorization and receipt signatures.

For related records, see Volume IV. Nuclear Materials Management Shipment Records, 1973-1975, 1978, 1980-1988; Nuclear Materials Shipment Logs, 1964-1972, ca. 1981-1982; and Nuclear Materials Shipment Summary Reports, 1981-1982, 1984, 1986-1994.

Data Elements: 89, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 6.5 cu. ft.

Nuclear Materials Shipment Summary Reports, 1981-1982, 1984, 1986-1994

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number. 1) A309, A317, B154, B253, B268 **B271** 2) B277 3) B341, B371 4) C108, C172 5) C263 6) C315 7) C345, D097, D153 8) D166 9) D168 10) D177 11) D178, D239, D266 12) D298 13) D304, D306, D318, D341-D342, E117, E134 14) E141 15) E192, E242, E257, E337, G031, G033, G035 16) G226, G234, G238 17) G329 18) G348, G358, G373, G375, H143 19) H144 20) H145, H159 21) H200 22) H222

- 23) H243
- 24) H270
- 25) H291, H299

Condition: Good to fair

Scanning Suitability: Series consists of computer-generated reports, some of which are faded.

Container Number. 1) A309, A317, B154, B253, B268 **B271** 2) B277 3) B341, B371 4) C108, C172 5) C263 6) C315 7) C345, D097, D153 8) D166 9) D168 10) D177 11) D178, D239, D266 12) D298 13) D304, D306, D318, D341-D342, E117, E134 14) E141 15) E192, E242, E257, E337, G031, G033, G035 16) G226, G234, G238 17) G329 18) G348, G358, G373, G375, H143 19) H144 20) H145, H159 21) H200 22) H222 23) H243

- 24) H270
 - 25) H291, H299

Medium: Paper

Duplication: Unknown

Volume: 33 cu. ft.

Nuclear Materials Shipment Summary Reports, 1981-1982, 1984, 1986-1994 (continued)

Arrangement: Chronological, thereafter numerical by MBA number

Originating Office: Nuclear Materials Accountability and Nuclear Materials Control and Accountability organizations of Rockwell International and EG&G

Finding Aids: Records Storage Receipt

Disposition Authority:

- 1) Records schedule under revision
- 2) DOE (1988) 5.4a(1-2)
- 3) Records schedule under revision
- 4) DOE(1988) 5.4a(1)
- 5) Records schedule under revision
- 6) DOE (1988) 5.4a(1)
- 7) Records schedule under revision
- 8) DOE (1988) 5.4a(1)
- 9) Records schedule under revision
- 10) DOE (1988) 5.4a(2)
- 11) Records schedule under revision
- 12) DOE (1988) 5.4a(2)
- 13) Records schedule under revision

14) DOE (1988) 5.4a(2)
15) DOE (1988) 5.4a(1)
16) DOE (1980) C26.4a(1)
17) Records schedule under revision
18) DOE (1980) C26.4a(1)
19) DOE (1988) 5.4a(1)
20) DOE (1988) 5.4a(2)
21) Records schedule under revision
22) DOE (1980) C26.4a(1)
23) DOE (1988) 5.4a(1)
24) Records schedule under revision
25) DOE (1988) 5.4a(1)

Series Description: These computer-generated reports were created to document the movement of nuclear materials among onsite Material Balance Areas (MBAs) by month. The reports record MBA, item, and project numbers; IDCs [Item Description Codes]; net weights; and weights of each element in a transfer.

For related records, see Volume IV. Nuclear Materials Management Shipment Records, 1973-1975, 1978, 1980-1988; Nuclear Materials Shipment Logs, 1964-1972, ca. 1981-1982; and Nuclear Materials Shipment Memoranda, 1974, 1981-1985, 1988-1991.

Data Elements: 89, 120

Nuclear Materials Transaction Reports, 1961-1989

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified up to Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number.

- 1) A111
- 2) A132, A134, A136-A137
- 3) A138, A143
- 4) A145
- 5) A163, A192
- 6) A227
- 7) A242, A250, A254, A257-A259
- 8) A284-A285
- 9) A295-A297
- 10) A298
- 11) A300, A303, A305, A329-A330, B122, B141, B145, B178, B189, B222
- 12) B265-B266
- 13) B296, B333, B379-B380, C218, C309, C373, D212, D226, D234, D256
- 14) D273
- 15) D299, D311, D343-D347, G152, G224, G327
- 16) H274

Condition: Good to fair

Scanning Suitability: Series consists of forms, poor-quality photocopies, handwritten data, oversized computer-generated reports, and microfilm.

Volume: 37.3 cu. ft. and 556 partial reels

Container Number.

- 1) A111
- 2) A132, A134, A136-A137
- 3) A138, A143
- 4) A145
- 5) A163, A192
- 6) A227
- 7) A242, A250, A254, A257-A259
- 8) A284-A285
- 9) A295-A297
- 10) A298
- 11) A300, A303, A305, A329-A330, B122, B141, B145, B178, B189, B222
- 12) B265-B266
- 13) B296, B333, B379-B380, C218, C309, C373, D212, D226, D234, D256
- 14) D273
- 15) D299, D311, D343-D347, G152, G224, G327
- 16) H274

Medium: Paper and microfilm

Duplication: Unknown

Arrangement: Varies; chronological or numerical by shipment or document number

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Nuclear Materials Transaction Reports, 1961-1989 (continued)

Originating Office: Idaho Operations Office, AEC; Nuclear Materials Control, Nuclear Materials Control and Accountability, Plutonium Operations, Product Engineering, Production Control, and Statistics and Nuclear Materials Control organizations of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority:

- 1) Records schedule under revision
- 2) DOE (1988) 5.9b
- 3) DOE (1988) 5.4a(1)
- 4) DOE (1988) 5.9b
- 5) Records schedule under revision
- 6) DOE (1988) 5.9b
- 7) Records schedule under revision
- 8) DOE (1988) 5.9b

9) Records schedule under revision 10) DOE (1988) 5.9b

11) Records schedule under revision12) DOE (1988) 5.8

13) Records schedule under revision

14) DOE (1988) 5.4a(1)

- 15) Records schedule under revision
- 16) DOE (1988) 5.4a(1)

Series Description: These transaction reports consist primarily of two types of forms, Department of Energy/Nuclear Regulatory Commission (DOE/NRC) Form 741, titled Nuclear Materials Transaction Report, and Atomic Energy Commission (AEC) Form 101, which were used to document the shipment of nuclear materials between Rocky Flats and other facilities. The forms include shipper and receiver RIS [Receiving Inspection Station] codes, names and addresses of shippers and receivers, nature of the transactions, account numbers, transfer authorities, material types and descriptions, packaging data, gross weights and volumes, fissile classes, and classification dates. Related documents, such as laboratory sampling results and other authorization forms, may also be attached to the forms. These contain plutonium button numbers; sealed can weights; radiation levels; plutonium isotopes and weights; weights of other isotopes in the buttons, including americium, silicon, gallium, uranium, lead, cadmium, and copper; stability and impurity factors; amounts shipped and received; gross quantities; physical and chemical descriptions; material histories and hazards; and appropriate approval signatures. It appears that AEC Form 101 is a predecessor to DOE/NRC Form 741.

For related records, see Volume IV. Nuclear Materials Shipment Logs, 1964-1972, ca. 1981-1982.

Data Elements: 89, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Nuclear Safety Audit Reports, 1972-1973

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are unclassified; 881 Archives is a security-controlled area.

Accession or Other ID Number. SWV87

Container Number: SWV87

Scanning Suitability: Series contains photocopies of forms.

Arrangement: Chronological

Originating Office: Nuclear Safety Group, Dow Chemical Company

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series consists of two-part audit reports. The first part notes the names of the audit team members, dates, buildings and areas audited, names of persons to whom the forms were sent, observations, procedure infractions, and signatures. The second part is a monthly summary of the audit forms in memorandum format, which may also include a detailed account of the audits and a discussion of corrective actions.

Data Elements: 81, 89

Volume: 0.1 cu. ft.

Condition: Fair

Medium: Paper

Duplication: Unknown

Part Evaluation Data Records, 1972-1975, 1981-1983

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Confidential/RD; 881 Archives is a securitycontrolled area. *Volume*: 0.1 cu. ft.

Condition: Good

Medium: Paper

Accession or Other ID Number: H275

Container Number: H275

Scanning Suitability: Series contains forms with data written in pencil.

Duplication: Unknown

Arrangement: Roughly chronological

Originating Office: Quality Engineering Operations Organization of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series consists of two types of forms, PEC [Part Evaluation Cycle] Data Log Sheets and Stability Evaluation sheets, although the relationship between, and purpose of, the forms are unclear. The Log Sheets record dates; ingot, part, and furnace numbers; time periods; and specification limits. The data on the Stability Evaluation sheets include casting, part, serial, carrier, and furnace numbers; and "sample verifies furnace" for "period," "through," "density," and "redensity" measurements.

Data Elements: 89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-100

Parts Disposition Records, 1953-1970, 1980-1983

Location: Active:

Inactive: RF-881 Archives, Room 214; LANL-Technical Area 55, NMT-5

Access Restrictions: Records are classified up to Secret/RD; 881 Archives and Technical Area 55 are security-controlled areas.

Accession or Other ID Number: RF-881 Archives: 1) A157, A183, B176, B282, C147, G218; LANL: 2) MF-RF-PC; 3) MF-RF-QC

Container Number: 1) A157, A183, B176, B282, C147, G218; 2) Reels 7-19; 3) Reels 1-33, 43-118

Scanning Suitability: Series contains colored card stock and inks, handwritten data, and microfilm copies of keypunch cards.

Volume: 3.03 cu. ft. and 120.5 reels

Condition: Good to poor; some micro-film is dark or faded.

Medium: Paper and microfilm

Duplication: Master microfilm copies are in the LANL Records Center.

Arrangement: Hardcopy records are chronological, thereafter numerical by part or report number; microfilm reels are numerical by reel number, thereafter by part or shipping number.

Originating Office: Material Review Board, Non-Nuclear Joining, Product Control, Production Control, Quality Control, and Quality Control and Inspection organizations of Dow Chemical Company and Rockwell International

Finding Aids: 1) Records Storage Receipt; 2-3) PSP Database

Disposition Authority: 1) Records schedule under revision; 2-3) DOE (1988) 3.3

Series Description: The records in this series document the final disposition of components found to be unsuitable for inclusion in the weapon assemblies produced at Rocky Flats. The components were manufactured by Rocky Flats and its vendors. The series includes keypunch cards, ledgers, transmittal letters, and forms. The following data may be found in this series: building numbers, final dispositions, classification levels, scrap classification codes, part names and serial numbers, quantities, descriptions of the items, deviation numbers, authorization signatures, program numbers, reasons for returns to vendors, and specifications and inspection data. MF-RF-QC microfilm reels contain copies of keypunch cards which appear to have been used to transfer data to a computer system.

Data Elements: 88-89, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-101

Plutonium Button Shipment Reports, 1981-1982

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: A139

Container Number: A139

Scanning Suitability: Series consists of bound computer-generated reports.

Arrangement: Chronological within the binders

Originating Office: Nuclear Materials Control and Accountability Organization, Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: DOE (1988) 5.4a(1)

Series Description: The reports in this series relate to the shipment of plutonium buttons, also referred to in these records as Savannah Buttons. The buttons appear to have been shipped from Rocky Flats to the Savannah River Plant. Several forms were generated for each shipment of buttons. One type lists the "OBS" number, button identification number, "ELE-LE," and the limit of error for each isotope. Savannah Button reports list the button number, shipping container number, percentage of plutonium content, sealed can and button weights, and plutonium weight per button in grams. Shipper-Receiver Difference Report Summary forms compare the gross weight of the plutonium metals and oxides received

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-102

Volume: 1 cu. ft.

Condition: Fair

Medium: Paper

Plutonium Button Shipment Reports, 1981-1982 (continued)

Series Description (cont'd)

versus the weights measured prior to shipment. Button and shipping container numbers and weights are provided in NMC [Nuclear Materials Control] Button Listing reports, and Unalloyed Plutonium Data Sheets provide the results of chemical analyses performed on each button. The sheets list button and shipping container numbers, shipping container radiation levels, sealed can weights in grams, radiation levels in millirems per hour (mrem/hr), button weights in grams, percentage weights of plutonium isotopes, parts per million (ppm) measurements of several other metals present, impurity and stability factors, and percentages of plutonium content. Other data sheets delineate amounts of plutonium isotopes, americium, all metals, and curies emitted by each metal. This series appears to be backup data for Nuclear Materials Transaction Reports (DOE/NRC Form 741).

For related records, see Volume IV. Nuclear Materials Transaction Reports, 1961-1989.

Data Elements: 89, 120

Plutonium Density Records, 1982

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Confidential/RD; 881 Archives is a securitycontrolled area. Volume: 0.3 cu. ft.

Condition: Good

Medium: Paper

Duplication: Unknown

Accession or Other ID Number: H275

Container Number: H275

Scanning Suitability: Suitable

Arrangement: Chronological

Originating Office: Quality Engineering Operations Organization, Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: These records provide dates, employee numbers, part types and serial numbers, operation numbers, temperatures, and density readings. It is not apparent what the Quality Engineering Organization used these sheets for—perhaps to ascertain that plutonium densities met proper specifications.

Data Elements: 16, 89

Plutonium Discard Records, 1963-1975, 1979-1981

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: E142, E310

Container Number: E142, E310

Scanning Suitability: Series consists of handwritten forms and computer-generated reports.

Arrangement: Chronological and numerical by "MS" code

Originating Office: Nuclear Materials Control Organization of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series was created to track equipment and materials contaminated with plutonium that was not economically recoverable. The records list the number of drums containing the discarded materials, the weight of each drum, types of contaminated items, weekly and cumulative net weights in kilograms, and the number of drums in each of three categories: "received or generated," "into process," and "on hand."

Data Elements: 89, 115, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-105

Volume: 0.3 cu. ft.

Condition: Fair

Medium: Paper

"Postmortem" Defects Analysis, 1970

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Record is classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: A404

Container Number: A404

Scanning Suitability: Series contains colored paper and photographs.

Arrangement: None

Originating Office: Product Engineering Organization, Dow Chemical Company

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series consists of an analysis of the deviations in a rejected weapon component. The analysis includes a narrative description of the problems, deviation causes, and analytical techniques used to identify the deviations. Photographs of the component and results of various tests, including nondestructive, tensile, and metallography, are also in the series. Data from the tests are type, part, and radiographic report numbers; limits of resolution; operator names; and authorizing signatures.

Data Elements: 8, 89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-106

Volume: 0.08 cu. ft.

Condition: Good

Medium: Paper and photographs

Preproduction Planning and Scheduling Records, 1982-1989

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified up to Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: 1) A210; 2) H158 Condition: Good to fair

Volume: 1.25 cu. ft.

Container Number: 1) A210; 2) H158

Medium: Paper, transparencies, slides, and photographs

Duplication: Unknown

Scanning Suitability: Series contains flow charts, computer-generated reports, handwritten data, colored inks, transparencies, slides, and photographs.

Arrangement: None

Originating Office: Program Scheduling and Analysis Organization and Quality Engineering-Non-Plutonium Production Organization of Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: 1) DOE (1988) 3.2, 3.4; 2) DOE (1980) C24.1

Series Description: These records were created to develop and track various component and system production plans prior to the start of full-scale production activities. The reports include system schedule names and dates, scheduled start and completion dates, number of days delayed, "CND" (red or green), process flow charts, operation procedure descriptions, metallography development reports, engineering evaluations, and statistical summaries.

Data Elements: 89

Prior Period Adjustment Book, 1969-1976

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number. D212

Container Number. D212

Scanning Suitability: Series consists of handwritten data.

Duplication: Unknown

Arrangement: Chronological

Originating Office: Nuclear Materials Control Organization of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: The data in this series appear to have been compiled and used to explain and rectify losses or gains in physical inventory amounts of SS [stainless steel] material. Overestimations and incorrectly recorded weight amounts were common reasons for discrepancies. Weights are given in grams.

Data Elements: 89, 120

Volume: 0.1 cu. ft.

Condition: Good

Medium: Paper

Location: Active: Inactive: RF-881 Archives, Room 214

Procedure and Program Development Records, 1965-1978

Location: Active: Inactive: RF-881 Archives, Room 214; DFRC

Access Restrictions: Records are classified up to Secret/RD: 881 Archives is a securitycontrolled area.

Accession or Other ID Number: RF-881 Archives: 1) H238; DFRC: 2) 430-77-0014 Condition: Good

Volume: 2.6 cu. ft.

Container Number: 1) H238; 2) 8970-8971

Medium: Paper and transparencies

Duplication: Unknown

Scanning Suitability: Series contains drawings, handwritten data, and transparencies.

Arrangement: 1) None; 2) Numerical by procedure number

Originating Office: Product Engineering and Quality Assurance organizations of Dow Chemical Company and Rockwell International

Finding Aids: 1) Records Storage Receipt; 2) NARA Standard Form 135

Disposition Authority: 1) Records schedule under revision; 2) DOE (1980) C16.5b

Series Description: This series contains records which document the development of procedures for weapons programs at Rocky Flats. Among the records are proposals, cost estimates, planning schedules, equipment lists, design proposals, descriptions of the division of responsibilities, correspondence, and superseded versions of plans and procedures under development.

Data Elements: 81, 88-89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

IV-109

Process Control Portfolios, 1967-1968

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: B303

Container Number: B303

Scanning Suitability: Series consists of bound volumes with handwritten data.

Arrangement: Numerical by Control Document number

Originating Office: Quality Engineering Organization, Dow Chemical Company

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: The portfolios in this series contain documents compiled to provide reference and historical data regarding various production processes. The documents in bound notebooks include Process Operation Route Sheets, Process Operation Sketch Sheets, Action Log Entries, Average and Range Charts, Ingot Sample Information, and Control Limit Worksheets. These forms indicate specification names; types of materials used (in ingots); process instructions; histories of parts or processes; tool/gage descriptions; building, product, and operator numbers; revision information; machine or work center identifiers; and part measurements.

Data Elements: 16, 31, 88-89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-110

Volume: 0.2 cu. ft.

Condition: Good

Medium: Paper

Process Operation Sheets (POSs), 1963-1989

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified up to Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: 1) A128, A222; 2) D271-D272; 3) E384; 4) H338, H418

Container Number. 1) A128, A222; 2) D271-D272; 3) E384; 4) H338, H418

Scanning Suitability: Series contains carbon copies, forms, handwritten data, coated paper with pencil drawings, and colored paper.

Arrangement: Numerical by POS or part number

Originating Office: Albuquerque Office, Dow Chemical Company; Manufacturing Engineering, Production Processing, Technical Writing, and Tool Engineering organizations of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: 1) Records schedule under revision; 2) DOE (1988) 3.1a(2); 3) DOE (1988) 3.1c; 4) Records schedule under revision

Series Description: Process Operation Sheets (POSs) were used to document step-by-step instructions for assembly processes. They include part numbers and descriptions; raw materials descriptions, shapes and specifications; tool crib numbers; POS revision numbers; tooling information; machine groups; operation descriptions; times of operations; and operator numbers. Diagrams and drawings included in the POS packets illustrate the operation steps and provide narrative descriptions of the steps and the weapons program numbers for which the assemblies were used. According to the records, some of the POS packets were obsolete and were superseded by more recent drawings, Engineering Orders, or plant orders.

Data Elements: 16, 88-89, 114, 117

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-111

Volume: 7 cu. ft.

Condition: Good to fair

Medium: Paper

Process Procedure Documents, 1952-1993

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified up to Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: A144, A151 A157, A159, A369, A410, B133, B308, C384-C385, D124-D125, D155, E104, E128, E132-E133, E135, E199, E201, E206, E276, E354, E376, G025, G027, H150-H151, H214, H330-H331

Container Number: A144, A151, A157, A159, A369, A410, B133, B308, C384-C385, D124-D125, D155, E104, E128, E132-E133, E135, E199, E201, E206, E276, E354, E376, G025, G027, H150-H151, H214, H330-H331

Scanning Suitability: Series contains thermal facsimile paper, colored paper, and drawings.

Arrangement: Numerical by Control Document number

Originating Office: Development and Product Engineering, Product Engineering, and Technical Writing organizations of Dow Chemical Company, Rockwell International, and EG&G

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series consists primarily of written procedures, commonly referred to as M-Documents. The records provide step-by-step instructions for all manufacturing, assembly, and inspection processes in production operations at Rocky Flats. Each document contains a title of the process, an "M" number, revision number (if applicable), effective date, buildings where activities took place, types of equipment and chemicals used, appropriate approval signatures, and a corresponding "M" drawing number. A weapon program number is also on the document. Process Operation Sheet and Product/Process Change Authorization numbers were provided if the procedure or final product specifications had undergone revisions. Some of the documents are referred to as "D" or "QT" documents. These are essentially the same as "M"-documents, but either are draft procedures (D) or refer to specific procedures (QT).

Data Elements: 81, 88-90, 117

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 23.06 cu. ft.

Condition: Good to fair; some records are water damaged.

Medium: Paper

Duplication: Unknown

IV-112

Product Engineering Correspondence, 1967-1969, 1972-1975

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: G194, H310

Container Number: G194, H310

Scanning Suitability: Series contains handwritten data.

Arrangement: Chronological

Originating Office: Product Engineering Organization, Dow Chemical Company

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series consists of the correspondence of the Product Engineering Organization. It contains analytical reports and letters regarding drawings, experimental data, budgetary and accounting issues, work from design agencies, engineering evaluations, criticality recommendations, preventive measures, and defective assemblies. The personal correspondence files of a department member who may have been the Building 778 superintendent are also included.

Data Elements: 88-89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-113

Condition: Good

Volume: 0.85 cu. ft.

Medium: Paper

Product/Process Change Authorizations (PCAs), 1963-1988

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified up to Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: 1) A369, A404; 2) B160; 3) B224, B264, D154; 4) E104; 5) G184, G302

Container Number: 1) A369, A404; 2) B160; 3) B224, B264, D154; 4) E104; 5) G184, G302

Scanning Suitability: Series consists of handwritten data, colored paper, forms, and carbon copies.

Volume: 5.9 cu. ft.

Condition: Good to poor

Medium: Paper

Duplication: Unknown

Arrangement: Varies; numerical by authorization/order number or chronological

Originating Office: Manufacturing Engineering, Metallurgical Operations, Plutonium Recovery, Product and Materials Control, Product Definition and Configuration Management, Product Engineering, and Technical Writing organizations of Dow Chemical Company and Rockwell International; Lawrence Livermore Laboratory; Los Alamos Scientific Laboratory; Sandia Laboratory; and the University of California

Finding Aids: Records Storage Receipt

Disposition Authority: 1) Records schedule under revision; 2) DOE (1988) 3.1e; 3) Records schedule under revision; 4) DOE (1988) 3.1b; 5) DOE (1988) 3.1e

Series Description: Product/Process Change Authorizations document revisions to processes, equipment, and components. The forms include product and Process Operation Sheet numbers, requestor names, reasons for the change requests, whether changes were permanent or temporary, approval signatures, incorporation instructions, materials dispositions, and applicable War Reserve program numbers. Some of the changes required approval by other facilities, so approval correspondence from Los Alamos Scientific Laboratory (now Los Alamos National Laboratory), Lawrence Livermore Laboratory, Sandia Laboratory (now Sandia National Laboratories), and the University of California are also part of this series.

For related records, see Volume IV. Process Operation Sheets (POSs), 1963-1989

Data Elements: 88-89, 114, 117

Production Activity Logs, 1984

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: E340

Container Number: E340

Scanning Suitability: Series consists of bound, colored-paper logs.

Arrangement: Chronological

Originating Office: Product Engineering Organization, Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series contains four logs which were presumably used to track production activities in three processes or mills: "Hat Anneal," "Press," and "2 High Rolling Mill." The Hat Anneal log lists part and furnace numbers, annealing time in minutes, dates, employee numbers, and remarks. The Press log records part numbers, types, dates, "carrier," "NGS," employee numbers, and remarks. An ingot number, employee number, date, type, number of parts, gauge, width, settings, "NGS," and remarks comprise each entry in the 2 High Rolling Mill log.

Data Elements: 16, 89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-115

Volume: 0.3 cu. ft.

Condition: Good

Medium: Paper

Production Correspondence, 1955-1963, 1967-1968, 1970-1971, 1985

Location: Active: Inactive: RF-881 Archives, Room 214; DFRC

Access Restrictions: Records are classified up to Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: RF-881 Archives: 1) A157; 2) B224, C321, D292; DFRC: 3) 434-86-0054

Container Number: 1) A157; 2) B224, C321, D292; 3) SB205795-SB205797

Scanning Suitability: Series contains onionskin copies and handwritten data. Duplication: Unknown

Medium: Paper

Arrangement: Chronological and numerical by letter number

Originating Office: Production Engineering, War Reserve Engineering, and various other organizations of Dow Chemical Company and Rockwell International; AEC, ERDA, and DOE

Finding Aids: 1-2) Records Storage Receipt; 3) NARA Standard Form 135

Disposition Authority: 1) DOE (1988) 3.5b; 2) Records schedule under revision; 3) DOE (1980) C16.5b

Series Description: This series contains correspondence regarding production activities at Rocky Flats and other facilities. The letters discuss deviation requests, specification and procedure changes, component descriptions, quality control, defective components, plutonium shipping, accountability and safety, materials handling, beryllium supplies, and calibration records. Specific activities in Buildings 371, 374, and 707 are mentioned in the records.

Data Elements: 6, 88-89, 114, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-116

Volume: 3.98 cu. ft.

Condition: Good to fair

Production Orders (POs), 1966, 1970-1973, 1977-1979, ca. 1981-1985

Location: Active:

Inactive: RF-881 Archives, Room 214; LANL Technical Area 55, NMT-5

Access Restrictions: Records are classified up to Secret/RD; 881 Archives and Technical Area 55 are security-controlled areas.

Accession or Other ID Number: RF-881

Container Number: 1) A254, B262-B263,

32-35, 38, 42, 44-125, 127-140, 142-144

B269, B309, C296, D163, G108, G250, G277, G315, TBF194-TBF195; 2) Reels 26-28,

Archives: 1) A254, B262-B263, B269, B309, C296, D163, G108, G250, G277, G315, TBF194-TBF195; LANL: 2) MF-RF-PC Volume: 12.75 cu. ft. and 108 reels

Condition: Good to fair

Medium: Paper and microfilm

Scanning Suitability: Series consists of forms, colored paper, multi-sized card stock, handwritten data, computer-generated reports, and microfilm.

Duplication: Accessions TBF195-TBF195 are to be microfilmed; master microfilm copies of the records at LANL are in the LANL Records Center.

Arrangement: Numerical by Production Order number

Originating Office: Final Quality Acceptance and Certification, Product Engineering, and Production Control organizations of Dow Chemical Company and Rockwell International

Finding Aids: 1) Records Storage Receipt; 2) PSP Database

Disposition Authority: 1) Records schedule under revision; 2) DOE (1988) 3.3

Series Description: Production Orders provide the proper sequence of operations and inspections for component and assembly manufacturing. Listed are serial or lot numbers; part, drawing, agency, control, deviation, heat/lot, account, and operation numbers; work centers; part descriptions; procedure numbers; employee names and numbers; start and completion dates; quantities; and "data or pendant" numbers.

For related records, see Volume IV. Stockpile Approved Product Records (SAPRs), 1955-1993.

Data Elements: 89, 120

Production Receiving Logs, 1958-1961

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: H397

Container Number: H397

Scanning Suitability: Series consists of handwritten logs.

Arrangement: Log entries are chronological.

Originating Office: Production Control Organization, Dow Chemical Company

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series consists of receiving logs for unspecified metals or components used in Building 777. The logs provide dates; carrier, serial, and casting numbers; weights; and receivers' identification numbers. One log indicates the serial or type numbers of items sent, return dates, and the items' condition prior to and after shipment. Items are identified only by serial or type numbers.

Data Elements: 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-118

Condition: Fair

Medium: Paper

Duplication: Unknown

Volume: 1 cu. ft.

Production Reports, 1969-1972

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: G277

Container Number: G277

Scanning Suitability: Series consists of forms, colored paper, and handwritten data.

Arrangement: Chronological

Originating Office: Non-Destructive Testing Organization, Dow Chemical Company

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: Production and inspection activities at Buildings 439 and 881 are summarized in these weekly production reports. Each report lists date, building number, document and change numbers, part type, and X-ray number. A second type of report describes changes, presumably made to procedure documents, that occurred each week.

Data Elements: 89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-

Volume: 0.25 cu. ft.

Condition: Fair

Medium: Paper

Duplication: Unknown

IV-119

Production Review Meeting Minutes, 1983-1984

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: A192

Container Number: A192

Medium: Paper

Condition: Good

Scanning Suitability: Suitable

Arrangement: Numerical by Control Document number

Originating Office: Manufacturing Technical Support Organization, Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: The Production Review Meeting Minutes describe a part's development relative to the general manufacturing schedule. They include DJO [Development Job Order] project status, plutonium material supply, foundry status, fabrication and assembly status, part quality, and descriptions of any problems encountered. Amounts of plutonium on hand and available for use are discussed in kilograms.

Data Elements: 89, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-120

Volume: 0.04 cu. ft.

Production Schedule Reports, 1970-1974

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: A177

Container Number: A177

Scanning Suitability: Series consists of oversized computer-generated reports.

Arrangement: Numerical by Control' Document number

Originating Office: Management Systems Organization, Dow Chemical Company

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: These computer-generated reports appear to document production projections for various weapons programs. The reports denote the time periods covered, workload case descriptions and major assumptions, program number designations, product numbers, "GPSS Model" numbers, "FSD," "NER," revision dates, part numbers and types, and scrap factors.

Data Elements: 89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-121

Volume: 0.25 cu. ft.

Condition: Good

Medium: Paper

Project Detail Summary Worksheets, 1986-1987

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: C157, C161

Container Number: C157, C161

Scanning Suitability: Series consists of computer-generated reports and handwritten data.

Arrangement: Reverse chronological

Originating Office: Nuclear Materials Control and Accountability Organization, Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: Rocky Flats used the computer-generated reports in this series to track the status and amount of nuclear materials on hand in various projects. NMC [Nuclear Materials Control] Transactions Transmitted reports provide the codes for the offices transferring or receiving the material and the original and recipient project numbers. Project Changes by Project, IDC [Item Description Code], and Element worksheets have handwritten additions which provide old and new project numbers, IDC, element code, and element weight for each project number.

Data Elements: 89, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-122

Condition: Good

Volume: 0.4 cu. ft.

Medium: Paper

Radiographic Testing Records, ca. 1956-1970, 1984-1935

Location: Active:

Inactive: RF-881 Archives, Room 214; LANL-Technical Area 55, NMT-5

Access Restrictions: Records are classified up to Secret/RD; 881 Archives and Technical Area 55 are security-controlled areas. Volume: 3 cu. ft. and 108 reels

Accession or Other ID Number: RF-881 Archives: 1) A408, TBF226-TBF227; LANL: 2) MF-RF-NDT

Container Number: 1) A408, TBF226-TBF227; 2) Reels 1-22, 115-133, 138-158, 162-187, 195-202, 234-245

Scanning Suitability: Series consists of colored forms, faded print, microfilm, and X-ray film.

Condition: Good to fair

Medium: Paper, X-ray film, and microfilm

Duplication: Accessions TBF226-TBF227 are to be microfilmed; master microfilm copies of the records at LANL are in the LANL Records Center.

Arrangement: Chronological and numerical by film or report number

Originating Office: Non-Destructive Testing and Production Control organizations of Dow Chemical Company and Rockwell International

Finding Aids: 1) Records Storage Receipt; 2) PSP Database

Disposition Authority: 1) DOE (1988) 3.2, 3.4; 2) DOE (1988) 3.3

Series Description: This series contains the results of radiography tests conducted on components and assemblies to insure that they met proper design specifications. The reports indicate test types; radiographic report, part, and batch numbers; limits of resolution; whether the items were accepted or rejected; comments; authorizing signatures; and dates. The X-ray film shows various views of the components or assemblies being tested. Logs that are also a part of the series were used to track the completed tests. Entries include report numbers and dates, "X-File" numbers, names of persons requesting tests, test descriptions and types, maximum depths, number of units, part numbers, number and types of views, film loads and numbers, "penetrameters," remarks, and dates returned.

Data Elements: 89

Rocky Flats Publications, 1972-1975

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: B182-B183

Container Number: B182-B183

Scanning Suitability: Series contains handwritten data and photographs.

Arrangement: Numerical by publication number

Originating Office: Technical Information Organization, Dow Chemical Company

Finding Aids: Records Storage Receipt

Disposition Authority: DOE (1988) 7.8

Series Description: This series is comprised of copies of technical papers written by Rocky Flats employees for publication or presentation. A Technical Information Office-Rocky Flats Division Routing Sheet for the Release of Information accompanies each paper to certify that it was reviewed prior to public release.

Data Elements: 89

Volume: 2 cu. ft.

Condition: Good

Medium: Paper and photographs

Salt Scrub Run Records, 1988

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: A134

Container Number: A134

Scanning Suitability: Series contains forms and computer-generated reports.

Arrangement: Chronological

Originating Office: Nuclear Materials Control and Accountability Organization, Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: DOE (1988) 5.9b

Series Description: This series contains forms and computer-generated reports which provide the results of a process that apparently extracted plutonium from a salt solution. The records provide run numbers, salt source numbers, net weights of the solution, weights of plutonium and americium, and whether solutions were current or backlogged. Also included on the forms are data about resulting products, including net weights of buttons, weights of plutonium and americium, weights of white and black salts, and amounts of plutonium and americium remaining in each salt. The date, shift, and cell location for each run is also provided. Employee numbers are indicated for some of the runs.

Data Elements: 16, 88

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-125

Volume: 0.12 cu. ft.

Condition: Fair

Medium: Paper

Scrap Materials Records, 1972-1982

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: A192, C167

Container Number: A192, C167

Scanning Suitability: Series contains forms and colored paper.

Condition: Good to fair

Volume: 0.34 cu. ft.

Medium: Paper

Duplication: Unknown

Arrangement: Reverse chronological and numerical by Control Document number

Originating Office: Nuclear Materials Control and Accountability Organization and Production Control Organization of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series is comprised of reports and correspondence which were used to maintain control over the production of, and costs related to, scrap materials at Rocky Flats. The records include definitions of scrap materials and costs, fabrication amounts, packing procedures, shipping data, scrap codes, analytical data regarding the isotopic content of the scrap materials, and correspondence with other Department of Energy facilities regarding the receipt of scrap materials from Rocky Flats.

Data Elements: 89

Serial Number Control Records, 1953-1962, 1970-1977

Location: Active:

Inactive: RF-881 Archives, Room 214; LANL-Technical Area 55, NMT-5

Access Restrictions: Records are classified as Secret/RD; 881 Archives and Technical Area 55 are security-controlled areas.

Accession or Other ID Number: RF-881 Archives: 1) E127; LANL: 2) MF-RF-PC Volume: 0.17 cu. ft. and 0.5 reel

Condition: Good to poor; some microfilm records are almost illegible.

Container Number: 1) E127; 2) Reel 7

Scanning Suitability: Series consists of colored paper, forms, handwritten data, and microfilm.

Medium: Paper and microfilm

Duplication: Master microfilm copies of the records at LANL are in the LANL Records Center.

Arrangement: Chronological and numerical by casting number

Originating Office: Section Supervisor (Building 91), Dow Chemical Company; Production Control Organization of Dow Chemical Company and Rockwell International; Los Alamos Scientific Laboratory; and the AEC

Finding Aids: 1) Record Storage Receipt; 2) PSP Database

Disposition Authority: 1) Records schedule under revision; 2) DOE (1988) 3.3

Series Description: This series consists of a log and correspondence which were used to track serial numbers for special components and assemblies manufactured at Rocky Flats. The log lists part type; casting, production order, and job order numbers; disposition; and remarks for each serial number assigned. The letters are between Rocky Flats, the Atomic Energy Commission, and the Los Alamos Scientific Laboratory (now Los Alamos National Laboratory), and from Rocky Flats to Oak Ridge, Sandia, and Hanford concerning the assignment and reassignment of serial numbers for "mock-ups" and assemblies.

Data Elements: 89

Shop Travelers, 1960, 1967, 1989-1992

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified up to Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: 1) A157, A250; 2) TBF62, TBF66, TBF73, TBF89, TBF96, TBF106, TBF118, TBF121, TBF131, TBF133, TBF139, TBF143

Container Number: 1) A157, A250; 2) TBF62, TBF66, TBF73, TBF89, TBF96, TBF106, TBF118, TBF121, TBF131, TBF133, TBF139, TBF143

Scanning Suitability: Series contains colored paper, handwritten data, graphs, bar codes, computer-generated reports, and microfilm.

Arrangement: Numerical by part serial number

Originating Office: Process Technology Projects and Product Engineering organizations of Dow Chemical Company, Rockwell International, and EG&G

Finding Aids: Records Storage Receipt

Disposition Authority: 1) Records schedule under revision; 2) DOE (1988) 3.3

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-128

Volume: 12.06 cu. ft. and 1 reel

Condition: Fair

Medium: Paper and microfilm

Duplication: TBF accessions are to be microfilmed.

Shop Travelers, 1960, 1967, 1989-1992 (continued)

Series Description: Shop Travelers are forms which accompanied components or assemblies during the manufacturing process to document that they were produced according to design specifications and program requirements. Each traveler includes order, part, lot, and serial numbers; quantities produced; part descriptions; control and deviation numbers; heat/lot codes; "work acct. ctr."; operation numbers, sequence, and descriptions; procedure instructions; drawing numbers; materials and specification document numbers; M-document and revision numbers; employee numbers; dates each operation was completed; EO [Engineering Order] numbers; and part classification codes. Recent versions also include bar coding which was used to track the status of each unit with a computer database.

For related records, see Volume IV. Stockpile Approved Product Records (SAPRs), 1955-1993.

Data Elements: 16, 88-89

South Albuquerque Area Office (SAAO) Monthly Inspection Reports, 1956-1964

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: A299

Container Number: A299

Scanning Suitability: Series consists of microfilm.

Arrangement: Chronological

Originating Office: South Albuquerque Area Office, AEC; Dow Chemical Company

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series primarily documents the monthly inspection activities of the South Albuquerque Area Office. The reports discuss lot verification operations, non-conforming lots, the number of rejections per month, defects approved by waiver, major defects, verification inspection activities, and total units inspected. This series may relate to Dow Chemical Company's inspection of components produced by American Car and Foundry Industries in Albuquerque, New Mexico.

Data Elements: 89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-130

Volume: 2 reels

Condition: Fair

Medium: Microfilm

Specific/Non-Specific Plutonium Inventory Reports, 1979-1981, 1984-1986

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area. Volume: 0.8 cu. ft.

Accession or Other ID Number: 1) E217; 2) G145

Container Number: 1) E217; 2) G145

Scanning Suitability: Series consists of computer-generated reports.

Arrangement: Numerical by project or IDC number

Originating Office: Nuclear Materials Control Organization, Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: 1) Records schedule under revision; 2) DOE (1988) 5.4a(1)

Series Description: These computer-generated reports appear to be inventories of specific and non-specific materials identified by Item Description Code (IDC). The reports list the amounts of plutonium alloys for each IDC number.

Data Elements: 89, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-131

Condition: Fair

Medium: Paper

SS [Stainless Steel] Material Control Ledger, 1966-1967

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Record is classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number. G194

Container Number: G194

Scanning Suitability: Series consists of an oversized handwritten ledger.

Arrangement: Chronological

Originating Office: Nuclear Materials Management Organization, Dow Chemical Company

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This ledger was used to track the SS [stainless steel] material inventory at Rocky Flats. A section concerning the onsite inventory contains a description of the material, "CR [Cold Rolled?] Beginning Inventory SS Net," "CR External Receipts SS Net," "External Shipments SS Net," Normal Operational Losses, "SS Net," "Missing or Unaccounted For SS Net," "Ending Inventory SS Net," posting source, "77-91 Plants SS Net," "71-76 Plants SS Net," and "Assembly Ledger SS Net." A section regarding offsite shipments was recorded on Atomic Energy Commission Form 104 and notes the facility to which materials were to be sent, shipment and receipt dates, "SS Net," and "NET U-235."

Data Elements: 89, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-132

Volume: 0.15 cu. ft.

Condition: Good

Medium: Paper

Stockpile Approved Product Records (SAPRs), 1955-1993

Location: Active:

Inactive: RF-881 Archives; LANL, Technical Area 55, NMT-5

Access Restrictions: Records are classified up to Secret/RD; 881 Archives and Technical Area 55 are security-controlled areas. Volume: 135.09 cu. ft. and 3,093 reels

Container Number:

Accession or Other ID Number.	
RF-881 Archives:	
1) A404, B138, C110-C113,	
D163, D380, G151, G170,	
G185, G381	
2) TBF37-TBF40, TBF42-TBF43	
3) TBF44	
4) TBF45	
5) TBF46	
6) TBF47	
7) TBF48	
8) TBF52-TBF54, TBF56, TBF58	
9) TBF60	
10) TBF61, TBF63, TBF65	
11) TBF67	
12) TBF68	
13) TBF69	
14) TBF70-TBF72, TBF74-TBF76	•
15) TBF77-TBF79	
16) TBF80-TBF81	
17) TBF82-TBF88, TBF90-TBF94	
18) TBF95, TBF97	
19) TBF98	
20) TBF99-TBF102	
21) TBF103-TBF104	· .
22) TBF107-TBF108	
23) TBF109-TBF110	
24) TBF111	
25) TBF112	
26) TBF113	,
27) TBF114	
28) TBF115	
29) TBF116-TBF117, TBF119-	
TBF120	

1) A404, B138, C110-C113, D163, D380, G151, G170, G185, G381 2) TBF37-TBF40, TBF42-TBF43 3) TBF44 4) TBF45 5) TBF46 6) TBF47 7) TBF48 8) TBF52-TBF54, TBF56, TBF58 9) TBF60 10) TBF61, TBF63, TBF65 11) **TBF67** 12) TBF68 13) TBF69 14) TBF70-TBF72, TBF74-TBF76 15) TBF77-TBF79 16) TBF80-TBF81 17) TBF82-TBF88, TBF90-TBF94 18) TBF95, TBF97 19) TBF98 20) TBF99-TBF102 21) TBF103-TBF104 22) TBF107-TBF108 23) TBF109-TBF110 24) TBF111 25) TBF112 26) TBF113 27) TBF114 28) TBF115 29) TBF116-TBF117, TBF119-**TBF120**

- Accession or Other ID Number (cont'd) 30) TBF121, TBF123-TBF124 31) TBF125 32) TBF126-TBF128
- 33) TBF129
- 34) TBF130
- 35) TBF132, TBF134, TBF136-TBF138
- 36) TBF140-TBF141
- 37) TBF142, TBF144-TBF145, TBF151-TBF162, TBF193
- 38) TBF222-TBF225
- 39) TBF228-TBF237, TBF252-TBF253, TBF265, TBF268-TBF270, TBF272-TBF278 LANL:
- 40) None
- 41) MF-RF-APR

42) MF-RF-PE

Condition: Good to poor; some of the microfilm is dark, faint, or illegible, and image orientation varies.

Scanning Suitability: Series contains microfilm, forms, computer-generated reports, and handwritten data. Container Number (cont'd)

- 30) TBF121, TBF123-TBF124
- 31) TBF125
- 32) TBF126-TBF128
- 33) TBF129
- 34) TBF130
- 35) TBF132, TBF134, TBF136-TBF138
- 36) TBF140-TBF141
- 37) TBF142, TBF144-TBF145, TBF151-TBF162, TBF193
- 38) TBF222-TBF225
- 39) TBF228-TBF237, TBF252-TBF253, TBF265, TBF268-TBF270, TBF272-TBF278
- 40) Bottom drawer of the second file cabinet on the left of NMT-5, Room 192
- 41) Reels 1680-1699, 1772-2347, 2501-3099, 4000-4224, 4226-4463, 4475
- 42) Reels 1-265, 277-278, 280-621, 624-625, 629-634, 640-641, 644, 647, 652-653, 655, 658, 661, 667-678, 900-1180, 1371-1409, 1497-1679, 1700-1754, 1756-1771

Medium: Paper and microfilm

Duplication: TBF accessions are to be microfilmed; master microfilm copies of the records at LANL are in the LANL Records Center.

Arrangement: Numerical by SAPR number, thereafter by part and serial number

Originating Office: Non-Nuclear Projects, Nuclear Project/WR Engineering, Product Engineering, Production Control, and Quality Certification organizations of Dow Chemical Company, Rockwell International, and EG&G; Systems Engineering Department, Babcock and Wilcox

Finding Aids: 1-39) Records Storage Receipt: 40-42) PSP Database

Disposition Authority:

- 1) Records schedule under revision
- 2) DOE (1988) 3.3
- 3) Records schedule under revision
- 4) DOE (1988) 3.3
- 5) Records schedule under revision
- 6) DOE (1988) 3.3
- 7) Records schedule under revision
- 8) DOE (1988) 3.3
- 9) Records schedule under revision
- 10) DOE (1988) 3.3
- 11) Records schedule under revision
- 12) DOE (1988) 3.3
- 13) Records schedule under revision
- 14) DOE (1988) 3.3
- 15) Records schedule under revision
- 16) DOE (1988) 3.3
- 17) Records schedule under revision
- 18) DOE (1988) 3.3
- 19) Records schedule under revision
- 20) DOE (1988) 3.3
- 21) Records schedule under revision

22) DOE (1988) 3.3

- 23) Records schedule under revision
- 24) DOE (1988) 3.3
- 25) Records schedule under revision
- 26) DOE (1988) 3.3
- 27) Records schedule under revision 28) DOE (1988) 3.3
- 29) Records schedule under revision
- 30) DOE (1988) 3.3
- 31) Records schedule under revision 32) DOE (1988) 3.3
- 33) Records schedule under revision
- 34) DOE (1988) 3.3
- 35) Records schedule under revision 36) DOE (1988) 3.3
- 37) Records schedule under revision
- 38) DOE (1988) 3.3
- 39) Records schedule under revision 40) Records schedule under revision 41-42) DOE (1988) 3.3

Series Description: Stockpile Approved Product Records (SAPRs), also known as War Reserve (WR) Bomb Books, are the historical records for each nuclear weapon and weapon component in the nation's weapons stockpile. The records in this series document activities in Buildings 444, 460, 707, 750, 777, and 881 and include the following weapons programs: B43, B54, B57, B61, B83, W45, W56, W62, W68, W69, W70, W76, W79, W80, W82, W84, W87, and W88. The SAPRs in this series consist of approximately 44 different types of forms which document the fabrication, assembly, testing, and inspection and certification of each component and assembly produced at Rocky Flats. The SAPRs include the following document types, listed in alphabetical order. Names that are in italics are those used on the forms themselves; names that are not italicized are those devised to best describe the contents and nature of the form:

Series Description (cont'd)

Acceptance Tags appear to have been attached to a component or assembly that was approved for use. Each tag contains part, suffix, serial, and lot numbers; materials source; vendor/heat lot, drawing, and Department of Energy (DOE) numbers; hardness; temperature; weight; assay; percent 240 [percentage of plutonium-240 in the component]; disposition code; acceptance signature or stamp; and date of disposition.

American Car and Foundry Inspection Route Cards are inspection travelers for stainless steel components manufactured by American Car and Foundry Industries (ACF) of Albuquerque, New Mexico, for Rocky Flats. Each traveler contains information about the inspection test results for a specific component. Data on the forms include a brief description of the component, ACF part and serial numbers, project and reference drawing numbers, inspection specifications (indicating item to be inspected), remarks, and inspectors' stamps and signatures.

Assembly Borescope Inspection Reports are test results which include part types, serial and recycle numbers, weld evaluation data, interior wall inspection results, and comments.

Assembly Process Cards document the assembly of components into a unit. The cards list part names, serial and lot numbers, operation steps and sequences, M-document numbers, operation numbers and descriptions, employee numbers and dates for each operation, comments noted by the operators, job numbers, and Atomic Energy Commission (AEC) and deviation numbers.

Assembly Product Records are indices or tables of contents which list the records pertaining to a single product.

Assembly Reject/Salvage Reports concern defect identification. They include descriptions of defects, where in the operation sequences defects were detected, defect causes, correcting departments, resultant corrective actions, and salvage data.

Band Inspection Program Records include dates, times, inspectors' last names, part type and serial numbers, tolerance levels in mm [millimeters], maximum and minimum "rd.," and deviation measurements.

Building 460 HPTC [High Pressure Test Cell?] Part Data Analysis Reports are test results for components subjected to pressure changes. Data include test cell numbers, test dates and times, software and profile configuration control numbers, design agencies, employee numbers, part and serial numbers, test types, external "STD" leak rates in cc/sec [cubic centimeters per second] and numbers, leak detector sensitivity data, and part run results for sides one and two in psi or psi/sec [pounds per square inch or pounds per square inch per second].

Series Description (cont'd)

Certification Tickets were used during the inspection process to insure that components met proper quality levels. Each ticket provides part type; serial and lot numbers; DOE part number; designations for "Accept, Scrap, Salvage, Rework, or Deviation"; deviation number; final disposition code; location where component was shipped; date; reference number; certified part/"SA" type number; and overall certification signatures and acceptance stamps.

Cutting Sheets document efforts to cut raw materials into smaller, usable sections. The sheets contain start and finishing dates; customer, part, order, purchase order, charge, die, job, bar, heat, and cutter numbers; lot sizes; materials; "B numbers"; lengths; weights; counts; cutter names; approximate yields; quantities; and remnants.

Engineering Process Data Entry Forms were used to record part numbers and revision codes; part names; "process by"; ECOs [Engineering Change Orders] in effect; department codes; sequence numbers; descriptions of operations; total numbers; work centers; and setup, run, and queue times.

Final Part Certification Cards were used to document the components that met required specifications. Each includes part types; serial, casting/batch, "I&A" drawing and revision, radiofilm, materials specification certification drawing sheet and revision, and overall disposition code numbers; final disposition dates; "matching" notes; material stream identifications; and verification and supervisory signatures.

Flowtester Test Data Reports include software, employee, and serial numbers; part types; dates and times of tests; starting system vacuums; rates of rise; temperatures during tests; differential pressure rates; volumes for test configuration; and calculated flow and mole rates.

Forge Welder No. 2 Data Acquisition Reports are computer-generated reports which provide part types and serial numbers, fixture numbers, dates, times, employee numbers, primary and secondary "RMS" weld current readings in amps [amperes], average weld forces in pounds, average weld pressures in psig [pounds per square inch gage], relative weld placements in inches, average total forces in pounds, average total pressures in psig, relative total displacements in inches, and indications of acceptability for the components undergoing weld testing.

Gas Mass Spectrometry-Backfill Gas Analysis Reports include MSL [Mass Spectrometry Laboratory?] numbers, analysis dates, analyst names and employee numbers, unit serial numbers, total unit pressures measured in Torr, components, percentages by volume, partial pressures, and authorizing MSL signatures.

"GTA" Data Acquisition Weld Summary Reports contain dates; times; part serial numbers; weld types; operation and man numbers; and mean weld data, which include high and low weld currents, "ARC" voltages, part rotation line feeds, argon and helium flows, and graphs of test results.

Series Description (cont'd)

Inspection Data Sheets were used to record results of the visual inspection and disposition of a component. Each form contains part type; casting batch and WR lot numbers; materials specification certification drawing number; material type and "p.o." numbers; job, part serial, "I&A" drawing and revision, and AEC part numbers; overall dispositions; accept or reject dates; and manufacturing disposition codes.

Job Status Reports were used to track vendor orders. They consist of job, charge, order, part, and operation numbers; customer and engineer names; quantities ordered and shipped; shipment dates; department names; hours worked; dollar amounts of orders; and remarks.

Laboratory Sample Results are computer-generated summary reports which list pertinent test results from laboratories involved in component testing. Each report indicates identification number; entry date; casting and DJO [Development Job Order] numbers; account charged; building number; "class."; and results from the Atomic Absorption Spectrometry, Plutonium Chemistry, Emission Spectrometry, Isotopic Mass Spectrometry, and Radiochemistry laboratories. All results are given in ppm [parts per million], with the exception of results from the Isotopic Mass Spectrometry Laboratory, which are given in percentages.

Manufacturing Process Evaluation Request [MPER] Reports were used to request that a process be evaluated for the possibility of enhancing efficiency. The forms provide MPER and quality control lot numbers; originators; dates; sections; descriptions of the problem/improvement objectives; quantities; part and component types; "WR Process," Route Card, revision, "Departs WR Process" step, and "Resumes WR Process," step numbers; special processing and inspection/test instructions; certification information; comments; and approval signatures.

Measuring Record/Zeiss Comet Reports are computer-generated reports apparently created during component testing. They provide tape, serial, drawing and supplemental drawing, and operator numbers; dates; and results under the headings "ADR/REC," "Operat.," "U-Tol," [upper and lower tolerance?] and "Dev."

Non-Destructive Testing Radiographic Reports give a general description of a component's or an assembly's condition and overall quality based on the results of radiographic testing.

Norland Data Reports are computer-generated reports that apparently document the results of component welding. Data on the reports include date and time; man and part serial numbers; weld being performed; primary and secondary current; "XFMR" Ration readings for Pre-heat, Weld, and Post-heat; and primary and secondary DC [Direct Current] Offset readings. All readings are given in volts.

Overall Certification Cards provide MC [major component], serial, and DOE part numbers; Accept, Scrap, Salvage, Rework, and Deviates designations; component lists with serial, lot, and deviation numbers; shipping container numbers; and inspector signatures, presumably for parts manufactured by vendors.

Series Description (cont'd)

Pit Count Sheets were used to document that pits contained the proper amount of plutonium-240 (Pu 240). They contain assembly, source, and part numbers; "Q value"; counts; weights; and total weights of Pu in pits. Weights are given in grams.

Production Orders provide serial or lot, part, drawing, DOE, control, deviation, heat/lot, procedure, operation, and account numbers; work centers; part descriptions; employee numbers; dates; quantities; and "data or pendant" numbers.

Proof and Leak Test Data Reports contain part serial, test cell, and bell jar numbers; employee numbers; dates; times; design agencies; system software configurations; part profile software configuration numbers; leak detector calibration and part run data; disposition (i.e., accepted or rejected); tester names; and comments.

Purchase Orders document the purchase and shipment of weapon components from vendors. The orders include purchase document numbers; supplier addresses; "F.U. Code"; seller and code numbers; delivery dates; requisition, job, building, Rockwell International code, and item numbers; material and specifications descriptions; quantities; and unit and total prices.

Quality Control Disposition Cards describe defects and deviations in components which were found during manufacture and inspection. Each card consists of a date; part name and number; shop order number; originating department; operation number; machine group; production operator clock number and shift; inspection station; quantities received, inspected, and accepted; description and assigned cause of the defect; and corrective and deviation actions taken.

Radiography Tags may have been attached to components or assemblies to indicate that they had undergone radiographic testing. The only recognizable data on the tags are dates.

Receipt Inspection Reports include request numbers; by whom the requests were made; dates; items; names; contract identification codes; suppliers; part serial numbers; general appearances; proper identifications; dispositions; forging lot, drawing and revision, material control, and procedure and revision numbers; and remarks.

Release for Production Reports contain die and part numbers, revision codes, charge and job numbers, customer names, part and lot data, and notes on changes to drawings and shop cards.

Shipment Memoranda accompany units entering and leaving the site. They provide shipper and receiver names and addresses; material classifications; shipment dates; Rocky Flats, DJO, and container numbers; sizes; weights; types; descriptions; and radiation information.

Series Description (cont'd)

Shop Travelers are forms which accompanied components or assemblies during manufacturing to document that they were produced according to design specifications and program requirements. Each traveler includes order, part, lot, and serial numbers; quantity produced; part description; control and deviation numbers; heat/lot code; "work acct. ctr."; operation numbers and descriptions; procedure instructions; drawing numbers; materials and specification document and M-document numbers; revision numbers; employee numbers; dates operations were completed; EO [Engineering Order] number; and part classification code. Recent versions may also include bar codes which were used to track a unit's status via a computer database.

Site Return Cards accompanied pits and weapon components which were returned to Rocky Flats for disassembly and reuse in other weapons.

Special Order Certification Data Reports accompanied special-order components to insure that they met unique specifications. The reports include DJO, "PO," part type, and serial numbers; design agency drawing and Rocky Flats drawing numbers; dimensional inspection data; tolerance data; weights; employee numbers; dates; material specification, certification, and analysis numbers; Product Engineering acceptance indicators; and radiographic report numbers.

Specification Exception Releases (SXR) gave authorization for the use of components which failed to meet specification requirements. Each release provides an SXR number, drawing number and suffix, use limitations, quantity, part name, drawing requirements and variation from the drawing, marking requirements, corrective action, agency, date, references, and remarks.

Supplied Material Certification Reports were used to document that materials and components supplied by vendors met Rocky Flats specifications. Each report consists of a certification number; item name; drawing, forging lot, material control, and serial numbers; quantity; comments; and certifying signatures.

Travel Card-Final Operations accompanied an assembly during final processing. Each card lists the final operations to be completed, dates performed, employee initials, and M-document numbers.

Universal Travel Card for Preassembly Processing Operations seem to be travelers which accompanied components during preassembly. They include part and serial numbers, lists of operations, employee numbers and dates for completed operations, M-document numbers, and remarks.

Volume Test from the Volumetric Determination System Reports provide the results of volume tests conducted on weapon components. These computer-generated reports include drawing, serial, employee, data software, and system software numbers; dates; start and end times; adaptor volumes; calculated volumes and ranges; pressure readings; and internal and external leak readings.

Series Description (cont'd)

Weld Wire Certification Reports contain certification stamps; sizes; lot, height, and stock numbers; net weights; purchase order numbers; quality assurance authorizing signatures; and dates.

For related records, see Volume IV. American Car and Foundry (ACF) Inspection and Certification Records, 1961-1968; Assembly/Disassembly Site Return Records, 1964-1983, 1986-1988; Assembly Process Cards, 1965-1984, 1986, 1989; Component Inspection and Certification Records, ca. 1954, 1959-1989; Deviation Request and Approval Records, 1958-1968, 1971-1973, 1978-1982, 1984; Nuclear Materials Shipment Memoranda, 1974, 1981-1985, 1988-1991; Production Orders (POs), 1966, 1970-1973, 1977-1979, ca. 1981-1985; Shop Travelers, 1960, 1967, 1989-1992; and Vendor Purchase Orders (POs), 1961-1988.

Data Elements: 8, 16, 88-89, 120

Tank Mixing Study Records, 1987

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are unclassified; 881 Archives is a security-controlled area.

Accession or Other ID Number. A376

Container Number: A376

Scanning Suitability: Series contains computer-generated reports.

Arrangement: Chronological

Originating Office: Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: DOE (1988) 14.1b

Series Description: This series consists of handwritten calculations and computer-generated data relating to experiments with tank mixing. The records contain a small number of memoranda which briefly describe tests to be conducted, but they do not contain supporting information concerning the purpose and outcome of the study.

Data Elements: 88

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Volume: 0.75 cu. ft.

Condition: Good

Medium: Paper

Duplication: Unknown

IV-142

Technical Reports, 1977-1978

Location: Active: Inactive: DFRC

Access Restrictions: Unclassified

Accession or Other ID Number: 434-80-0037

Container Number: 706702-706703

Scanning Suitability: Series contains photocopies.

Arrangement: Numerical

Originating Office: Product Engineering and Technical Information organizations, Rockwell International

Finding Aids: NARA Standard Form 135

Disposition Authority: GRSX 19.7

Series Description: This series is a collection of technical reports, most of which were written by Rocky Flats staff. Among the subjects addressed are chemical processes, beryllium surface damage, and ingot casting. Most of the reports in this series are photocopies.

Data Elements: 77, 88, 103

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-143

Volume: 2 cu. ft.

Condition: Fair

Medium: Paper

Tensile Test Results, 1971

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are unclassified; 881 Archives is a security-controlled area.

Accession or Other ID Number: G292-G293

Container Number: G292-G293

Scanning Suitability: Series contains graph paper and handwritten data.

Duplication: Unknown

Arrangement: By material sample type and number

Originating Office: Mechanical Testing Research and Development-Gen. Met. [General Metallurgy?] Organization, Dow Chemical Company

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: Tensile test records for a variety of materials comprise this series. Materials tested include beryllium, aluminum, SS [stainless steel], copper wire, steel, "MONEL" tubing, silver, titanium, Neoprene, and mylar laminated tape. Results were recorded in graph format and on standard forms for each sample. These indicate the material, history, date, program (especially for SS materials), load range in pounds, crosshead speed in inches per minute, gage length in inches, extensometer, magnification, strain rate in inches per inches per minute, charge number, submitting name, tester initials, sample number, dimensions, area in square inches, ultimate strength in pounds and 10³ pounds per square inch, 0.2 percent yield strength, elongation, and remarks.

Data Elements: 89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-144

Volume: 2 cu. ft.

Condition: Good

Medium: Paper

Tritium Sample Transfer Log, 1986-1988

Location: Active: Inactive: DFRC

Access Restrictions: Unclassified

Volume: 0.05 cu. ft. (1 volume)

Accession or Other ID Number: 434-91-0046

Container Number: 49779

Scanning Suitability: Series consists of a handwritten log.

Arrangement: None

Originating Office: Rockwell International

Finding Aids: NARA Standard Form 135

Disposition Authority: DOE (1988) 1.5c

Series Description: The Tritium Sample Transfer Log was apparently maintained to monitor the transfer of tritium between onsite buildings. Data include dates of shipment, building and room numbers to which the samples were shipped, sample numbers, and radiation levels of the samples in picocuries per 100 squared centimeters.

For related records, see Volume VI. Tritium Sampling Records, 1975-1984.

Data Elements: 88, 103, 120, 124

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-145

Condition: Good

Medium: Paper

United Kingdom Exchange Program Records, 1964-1966, 1968

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified up to Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: A261, G227

Container Number: A261, G227

Scanning Suitability: Series contains colored paper and inks and handwritten data.

Arrangement: Loosely chronological

Originating Office: Production Control and Quality Assurance organizations of Dow Chemical Company

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: The records in this series document an exchange program between the United States (US) and the United Kingdom (UK) in which the US provided uranium to the UK and the UK provided plutonium to the US. The primary documents in the series are Analytical and Process Data forms which certify the quality of material sent to the UK. Data on the forms include "cans" serial numbers; dates materials were canned; gross, "OY," U-235, and uranium isotope weights; percentages of total uranium; upper and lower limits of uranium, lithium, boron, and fluorine; serial numbers of the inner and outer shipping containers; and dates the "cans" were packed. Certification forms acknowledge the quality and purity of the material being sent and contain shipment reference numbers, shipping dates, and management signatures. Related records include bills of lading, testing procedures, shipment reports for materials coming from the UK, memoranda, meeting minutes, and material identification count and weight sheets. These sheets contain alpha background levels in counts per minute; dates; operator numbers; and specifications for materials, packaging, and shipping. The Pantex Facility was the intermediary for the exchange program between Rocky Flats and the UK.

Data Elements: 16, 88-89, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

Condition: Fair

Volume: 1.4 cu. ft.

Medium: Paper

Duplication: Unknown

IV-146

Uranium-Niobium Alloy Reports, 1977-3978, 1981-1987

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: D196

Container Number: D196

Volume: 1 cu. ft.

Condition: Good

Medium: Paper

Scanning Suitability: Series contains photocopied metallography reports.

Duplication: Unknown

Arrangement: Chronological

Originating Office: Quality Engineering and Control Organization, Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: DOE (1988) 3.2a

Series Description: These reports were created to comply with product specifications developed by Los Alamos Scientific Laboratory (now Los Alamos National Laboratory). Generally, the reports note any scrapped parts not representative of Rocky Flats War Reserve materials. Several appendices are attached to the reports which include data for ingot impurities, niobium part analyses, density determinations, averages and ranges for major impurities and part density determination readings, and statistical summaries of chemistry and density data.

Data Elements: 88-89

Vendor Inspection and Certification Records, 1963-1980, 1983-1992

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified up to Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number.

 A264, A266-A269, A271-A273, B187, C219, C295, C361, D100, E155, E318-E319, E376, G150, H238, SWV20-SWV23, SWV42
 TPE41 TPE40 TPE51 TPE55

- 2) TBF41, TBF49-TBF51, TBF55, TBF59
- 3) TBF168-TBF169

Condition: Good to fair; some records are water damaged.

Scanning Suitability: Series consists of forms, colored paper, computer-generated reports, drawings, carbon copies, and handwritten data.

Container Number.

- 1) A264, A266-A269, A271-A273, B187, C219, C295, C361, D100, E155, E318-E319, E376, G150, H238, SWV20-SWV23, SWV42
- 2) TBF41, TBF49-TBF51, TBF55, TBF59
- 3) TBF168-TBF169

Medium: Paper

Volume: 26.02 cu. ft.

Duplication: TBF accessions are to be microfilmed.

Arrangement: Chronological and numerical by serial, product, or document number

Originating Office: General Laboratory and Final Part Certification, Final Quality Assurance and Certification, Procurement Quality Support, Production Control, Quality Assurance, Quality Control, Quality Engineering and Control, and Technical Writing organizations of Dow Chemical Company, Rockwell International, and EG&G; Babcock and Wilcox

Finding Aids: Records Storage Receipt

Disposition Authority: 1) Records schedule under revision; 2) DOE (1988) 3.3; 3) DOE (1988) 14.6a

Vendor Inspection and Certification Records, 1963-1980, 1983-1992 (continued)

Series Description: Vendor Inspection and Certification Records were used to insure that raw materials and components supplied by vendors for use and assembly at Rocky Flats met the design, manufacturing specifications, and quality controls for the appropriate weapon program. Test results may also accompany these inspection and certification records. The records are comprised of one or more of the following data items: Quality Assurance Lot number; item identification number; part number; part use; Department of Energy part number; casting/batch number; War Reserve program/lot number; "I&A" drawing and revision numbers; materials specification certification drawing sheet and revision numbers; "Accept, Scrap, Salvage, Rework, or Deviation" designation; deviation number; deviation data; final disposition code; shipment addresses; date; reference number; certified part/"SA" type number; submission status (whether an original or resubmission); inspection instructions; lot size; material and process certification numbers; date; remarks; and authorization and acceptance signatures and stamps.

For related records, see Volume IV. American Car and Foundry (ACF) Inspection and Certification Records, 1961-1968; Stockpile Approved Product Records (SAPRs), 1955-1993; and Vendor Purchase Orders (POs), 1961-1988.

Data Elements: 89, 115, 120

VOLUME IV. PRODUCTION AND MATERIALS HANDLING

IV-149

Vendor Material Control Number Logs, 1966-1968

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are unclassified: 881 Archives is a security-controlled area.

Accession or Other ID Number. A266

Container Number: A266

Scanning Suitability: Series consists of bound handwritten volumes.

Duplication: Unknown

Arrangement: Numerical by material control number, thereafter by category

Originating Office: Quality Acceptance Organization, Dow Chemical Company

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: This series consists of volumes which were used to track the control numbers assigned to materials manufactured by vendors, including American Car and Foundry Industries. The logs list material control and purchase order numbers, vendor names, part numbers, quantities, samples, heat numbers, alloys, dates sent to the laboratory, dates released, and remarks. Categories in the logs include Category "J" Forgings, Bar Stock, Raw Stock, Hardware, SS [Stainless Steel] Plating, Case Pressing, Bonding, and In-Process Forgings.

For related records, see Volume IV. American Car and Foundry Industries (ACF) Production Route Cards, 1961-1968 and Vendor Inspection and Certification Records, 1963-1980, 1983-1992.

Data Elements: 89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-150

Volume: 1 cu. ft.

Condition: Good

Medium: Paper

Vendor Purchase Orders (POs), 1961-1988

Location: Active:

Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified up to Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number.

- 1) A255, A274, B112, B114, B116, B129, B138, B148, B171, B215, B217, B233, B304, B311, B313, B345, B352, C361, C370, D101
- 2) SWV58-SWV59, SWV61-SWV62, SWV64, SWV66, SWV100-SWV101, SWV104, SWV106-SWV107, SWV110, SWV113, SWV116

Condition: Fair

Scanning Suitability: Series consists of colored paper, forms, handwritten data, charts, graphs, and photographs.

Arrangement: Numerical by purchase order number

Originating Office: Final Quality Assurance and Certification Organization and Quality Certification Organization of Dow Chemical Company and Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: 1) Records schedule under revision; 2) DOE (1988) 3.4

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-151

Volume: 34 cu. ft.

Container Number.

- 1) A255, A274, B112, B114, B116, B129, B138, B148, B171, B215, B217, B233, B304, B311, B313, B345, B352, C361, C370, D101
- 2) SWV58-SWV59, SWV61-SWV62, SWV64, SWV66, SWV100-SWV101, SWV104, SWV106-SWV107, SWV110, SWV113, SWV116

Medium: Paper and photographs

Vendor Purchase Orders (POs), 1961-1988 (continued)

Series Description: Purchase Orders document the purchase, shipment, and quality of weapon components made by vendors. The orders include purchase document numbers; supplier addresses; "F.U. Codes"; seller and code numbers; delivery dates; requisition, job, item, and building numbers; Dow Chemical Company or Rockwell International code numbers; material and specifications descriptions; quantities; disposition data; authorizing signatures; and unit and total prices. Related documents which may accompany the purchase orders include:

Certificate of Inspection forms contain QA [Quality Assurance] Lot, item identification, and part numbers; part uses; submission status (whether original or resubmission); inspection instructions; lot sizes; material and process certification numbers; dates; remarks; and authorizing signatures.

Field Trip and Inspection Reports were used to record the results of visits made by Rocky Flats personnel to vendor companies to discuss and review vendors' manufacturing processes and to insure that the components met Rocky Flats specifications. These reports include vendor names, addresses, and contact persons; drawing numbers and revision codes; release engineering order numbers; part names and descriptions; supplier evaluation data; remarks; and dates.

High Alloys Analysis Sheets are test results which include customer order numbers, alloy/powder types, meshes, lot numbers, quantities shipped, screen analyses, physical properties, chemical analyses of elements, "green properties," sintering conditions, and sintered properties.

Inspection Data Sheets were used to record the results of component inspections and disposition. The forms contain part type identifiers; casting batch, War Reserve lot, materials specification certification drawing, material type and "po," job and part serial, "I&A" drawing and revision, and Atomic Energy Commission part numbers; overall dispositions; acceptance or rejection dates; and manufacturing disposition codes.

Production Orders (POs) list the proper sequence of operations and inspections for component and assembly manufacturing. They provide serial or lot, part, drawing, Department of Energy, control, deviation, heat/lot, operation, and account numbers; work centers; part descriptions; procedure numbers; employee numbers and names; start and completion dates; quantities; and "data or pendant" numbers.

Vendor Purchase Orders (POs), 1961-1988 (continued)

Series Description: (cont'd)

Quality Control Disposition Cards describe defects and deviations in components found during manufacture and inspection. The cards consist of dates; part names and numbers; shop order numbers; originating departments; operation numbers; machine groups; production operator clock numbers and shifts; inspection stations; quantities received, inspected, and accepted; descriptions and assigned causes of defects; and corrective and deviation actions.

For related records, see Volume IV. Production Orders (POs), 1966, 1970-1973, 1977-1979, ca. 1981-1985; Stockpile Approved Product Records (SAPRs), 1955-1993; and Vendor Inspection and Certification Records, 1963-1980, 1983-1992.

Data Elements: 89, 120

Vendor Quality Directives, 1986

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: A192

Container Number: A192

Scanning Suitability: Suitable

Arrangement: Numerical by Control Document number

Originating Office: Rockwell International

Finding Aids: Records Storage Receipt

Disposition Authority: Records schedule under revision

Series Description: The directives in this series appear to have been used to regulate the procurement of certain materials. The directives were coordinated by the Chemical Standards Laboratory (Building 125), Building 707 Assembly Production, and Procurement Quality Engineering (Building 881), but information also came from Quality Certification (Building 707) and Laboratory Mass Spectrometry.

Data Elements: 89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-154

Volume: 0.04 cu, ft.

Condition: Good

Medium: Paper

Weapons Production Operations Appraisal Records, 1963, 1966, 1968-1970

Location: Active: Inactive: DFRC

Access Restrictions: Unclassified

Accession or Other ID Number: 434-90-0061

Container Number: 764009

Scanning Suitability: Series contains photocopies and handwritten notes.

Volume: 0.1 cu. ft.

Condition: Good

Medium: Paper

Duplication: Unknown

Arrangement: None

Originating Office: Product Engineering Organization, Dow Chemical Company

Finding Aids: NARA Standard Form 135

Disposition Authority: DOE (1988) 1.8f

Series Description: The Weapons Production Operations Appraisal Records consist of a single folder of correspondence, interoffice memoranda, reports, and meeting agendas concerning the appraisal of work efficiency and safety in the Weapons Production Division. Records dated 1970, resulting from a followup to an earlier appraisal in 1969, focus on the problems targeted, corrective actions proposed, and actions taken as a result of the first study. Also included is a *Programming and Control Handbook*, which relates to production and support functions, including industrial engineering, tooling fabrication, nuclear component fabrication, and material recovery.

Data Elements: 3, 6, 88-89

Weapons Production Reference Reports, 1956, 1960

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Secret/RD; 881 Archives is a securitycontrolled area.

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Accession or Other ID Number: 1) A157; 2) A369

Container Number: 1) A157; 2) A369

Scanning Suitability: Series contains drawings and photographs.

Arrangement: Numerical by Control Document number

Originating Office: Technical Writing Organization, Dow Chemical Company

Finding Aids: Records Storage Receipt

Disposition Authority: 1) DOE (1988) 3.5b; 2) Records schedule under revision

Series Description: This series contains reference books consisting of narratives, drawings, and photographs that detail the different types of weapons assemblies produced at Rocky Flats. While part numbers, materials, and weights are discussed, the books were used primarily for reference purposes.

Data Elements: 88-89

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-156

Volume: 0.16 cu. ft.

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Condition: Good to fair

Medium: Paper and photographs

Weld Underbead Videotalies, 1988

Location: Active: Inactive: RF-881 Archives, Room 214

Access Restrictions: Records are classified as Confidential/RD; 881 Archives is a securitycontrolled area.

Accession or Other ID Number: A212-A215

Container Number: A212-A215

Scanning Suitability: Not suitable; series consists of videocassettes.

Arrangement: Numerical by tape number

Originating Office: Quality Assurance Department (Building 460), Rockwell International

Finding Aids: Records Storage Receipt; box list

Disposition Authority: DOE (1988) 3.2 or 3.4

Series Description: This series consists of 3/4 inch videocassettes labeled Weld Underbead for SP [special product] Numbered Components. Equipment to review the cassettes was not available.

Data Elements: 88

VOLUME IV. PRODUCTION AND MATERIALS HANDLING IV-157

Volume: 4 cu. ft. (56 videocassettes)

Condition: Unknown

Medium: 3/4 inch videocassettes