

20100

ROCKY FLATS

DATE 10/16/96			
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MEMORANDA

"SAY IT IN WRITING"



000064089

SUBJECT: BUILDING 707 MODULES "A" & "F" WASTE MANAGEMENT PLAN

DISCUSSION

Attached for your information and files is the Building 707 Modules "A" & "F" Waste Management Plan. This distribution is limited to those individuals who are directly involved with the plan's development and implementation. Please insure that individuals within your staff who have responsibility for waste management activities are familiar with the responsibilities outlined in this plan.

RESPONSE REQUIREMENTS

No response is required. Questions concerning this Waste Management Plan should be addressed to Mary T. Aycock at X5309.

MTA:dlu

Attachment:
As Stated

Distribution:

K-H

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SSOC

- M. D. Klein - B706

Partha Chatterji
SIGNATURE

10/16/96

ADMIN RECCRD

RF-34700 (7/84)

1/21

B707-A-000045



Rocky Mountain
Remediation Services, L.L.C.
. . . protecting the environment

**Building 707
Salt Residue Stabilization and Repack Project
Building 707 Modules A & F**

Waste Management Plan

Rocky Flats Environmental Technology Site

Prepared by

Rocky Mountain Remediation Services, L. L. C.

REVISION 2

OCTOBER 1996

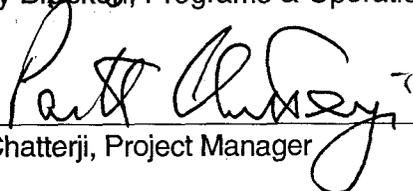
2

**SALT RESIDUE STABILIZATION AND REPACK PROJECT
BUILDING 707 MODULES A & F
WASTE MANAGEMENT PLAN**

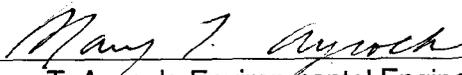
REVISION 2

OCTOBER 1996

This Waste Management Plan has been reviewed and approved by:

 _____ Gary Bracken, Programs & Operations Support	 _____ P. Chatterji, Project Manager	<u>10/14/96</u> Date	<u>10/3/96</u> Date
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This Waste Management Plan was prepared by:

 _____ Mary T. Aycock, Environmental Engineer	<u>10/9/96</u> Date
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SALT RESIDUE STABILIZATION AND REPACK PROJECT BUILDING 707 MODULES A & F WASTE MANAGEMENT PLAN

1.0 SCOPE

The processes of decontamination, dismantlement, and demolition of the Rocky Flats Environmental Technology Site (RFETS) facilities may result in the generation of solid and liquid radioactive waste, mixed waste, and hazardous waste which must be managed in accordance with applicable State and Federal regulations. The purpose of this document is to address the applicable requirements for waste management activities associated with the Building 707 Salt Residue Stabilization and Repack Site Preparation Project, Modules A and F and describe the program which will be implemented to insure that these requirements are met. Waste generating activities, waste characterization, and waste certification requirements (contingent upon the disposal Waste Acceptance Criteria [WAC]), identified during project assessment, will be used to develop requirements for waste processing, packaging, storage, and transportation as well as to satisfy the WAC for final disposal. The technical basis for development of the Waste Management Plan (WMP) is outlined in the *U.S. Department of Energy Office of Environmental Management Decommissioning Resource Manual*, dated August 1995, and the Draft Decommissioning Program Plan.

Buildings 707 and 779 are managed by Safe Sites of Colorado (SSOC). The Residue Elimination Project, managed by Kaiser-Hill Project Management, has tasked Rocky Mountain Remediation Services (RMRS) to accomplish the Site Preparation activities that include strip out and waste management. This project will therefore be done as a team effort with SSOC providing Building Operations and Program Management Support, K-H providing Project Management support, and RMRS conducting the project-specific strip out and waste management functions.

The following is a summary of the Salt Site Preparation Scope for Module A:

- Removal of three (3) gloveboxes with interior equipment to include: A-80, A-110, and A-125.
- Removal of the optical equipment at glovebox A-75.
- Removal of all internal equipment from the following gloveboxes: A-70, A-75 A-85(N. half), A-90, A-100, A-120, and A-125.
- Removal of equipment in the caged area to include a B-box, solvent sink with pumps, and other miscellaneous equipment.
- Removal of non-VSS piping and electrical equipment
- Removal of storage cabinets at west end of module (6 ea.).
- Removal of the GB80 O₂ Analyzer and associated ancillary equipment
- Site preparation of Non-Destructive Assay (NDA) areas to include removal of carousel type glovebox in Room 167, removal miscellaneous equipment in Room 169, equipment removal from the X-ray support offices, Rooms 171, 175, 179, and 180, and the Dark Room, Room 173.

The Module A Project also includes work in Building 779: Removal of gloveboxes 870 and 871 and transport to Building 707 for reuse.

The following is a summary of the Salt Site Preparation Scope for Module F:

- Removal of 16 automated and 8 manual pump down stations.
- Removal of Pigma welder No. 1.
- Removal of two (2) EB welders with all appurtenances.
- Removal of miscellaneous other equipment, desks and tables.
- Removal of miscellaneous other equipment, desks and tables.
- Remove miscellaneous materials and walls in Rooms 181, 182, and 183, and 196
- Removal of various walls in the Rooms 181, 182, and 183 office area.

The gloveboxes and equipment in Building 707 have all been previously used and are contaminated to various degrees. Three of the gloveboxes have significant quantities of Plutonium holdup which will be taken care of by the building (SSOC) operations personnel. The equipment to be removed from Module F is reported to have minimal contamination, but most likely will still have to be treated as low-level waste (LLW). Items will be identified for potential free-release through the Radiological Engineering group. Some materials, such as lead and stainless steel will be identified for possible recycling, if contamination levels are low-level.

The schedule calls for the Salt Site Preparation project to begin April 29, 1996 with a completion date of December 30, 1996. To complete the project on schedule, two or more shifts per day will be required. Waste will be generated daily (all shifts) for the duration of the project for Modules A and F and the NDA area. Minimal waste will be generated in Building 779, as these are cold gloveboxes that were connected to the chainveyor line, but for which final installation was never completed. Currently, there are drums and crates being stored in the hallways of the building which should be removed to allow movement of equipment, crates, waste containers, etc. through the hallways and in and out of the building.

This project will result in the generation of hazardous, mixed, LLW, and Transuranic (TRU) wastes and will require that a pre-job assessment be conducted to identify hazardous and radiological contaminants that may be present within the module during the equipment removal process. Projected volumes and types of wastes to be generated are discussed in Section 3.0 and are based on preliminary planning and characterization activities. Project scope includes permanent disposition (i.e., disposal, recycle, etc.) of all waste (or its equivalent) generated during project activities.

2.0 RESPONSIBILITIES/POINTS OF CONTACT

This section of the WMP presents a management overview of the organization which will be in place to address waste management for this project. Key personnel who act as points of contact are identified in this section of the plan. An example of a Project Specific Organization Breakdown Structure for a typical decommissioning project is shown in Figure 1. The key responsibilities related to waste management are outlined below:

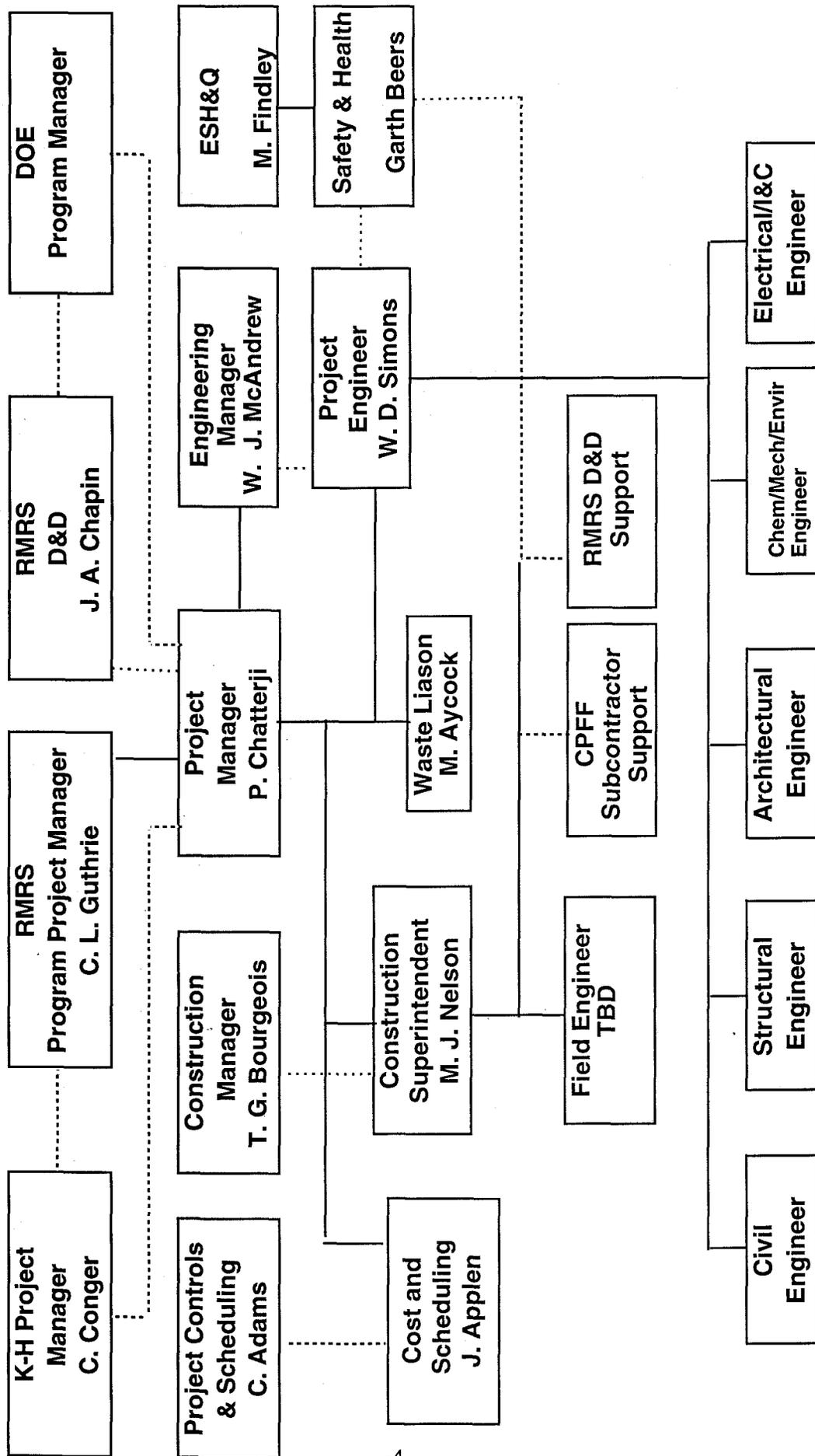
2.1 PROJECT MANAGER (P. Chatterji)

The Project Manager is responsible for overall management of the project including overall management of wastes generated by his specific project. These responsibilities include assuring

Project Specific Organization Breakdown Structure (OBS) Site Preparation for Salt Residue Stabilization & Repack Subproject

Auth. No. 368400

Figure 1



Attachment V

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adequate and timely characterization/projection of waste to be generated, to assure that plans are in place and coordinated to deal with the type and quantities of waste to be generated and dispositioned, to prepare cost estimates and fund for disposition of waste, and coordinate all project-specific waste management issues, including preparation of the WMP and assuring its implementation. The Project Manager coordinates activities with the Waste Management Liaison, Project Engineer, and Construction Superintendent to insure that issues associated with waste generation are addressed.

2.2 WASTE MANAGEMENT LIAISON (Mary T. Aycok)

The Waste Management Liaison reports to the Project Manager and is responsible for coordination of waste management activities across organizational lines which may involve the Waste Generator Services group, the Waste Operations group for treatment, storage and disposal, the Transportation group, the building Environmental Coordinator, and other groups such as Nuclear Safety which may become involved in the process of waste management for the project. Representatives from the various management groups involved are designated at the onset of the project and participate in routine meetings to discuss issues associated with waste management for the project.

2.3 WASTE OPERATIONS SUPPORT (General)

Waste Operations provides services to the project, including characterization of waste, receipt of waste and other materials from the project, treatment, disposal, and recycle as available, and storage of waste. Day-to-day support to the project includes waste packaging, assay, collection of waste, certification, and special services such as size reduction, decontamination, and other treatments as necessary.

2.3.1 Decommissioning Support Manager (Gary Bracken)

Support to decommissioning projects is coordinated through a management level position under the title of "Decommissioning Support Manager." Waste management aspects of pre-project planning, assignments of responsibility for decommissioning related actions within Waste Operations, development of cost-effective strategies to address unique waste issues, and management follow-up to assure effective overall support to decommissioning are the responsibility of the Decommissioning Support Manager.

2.3.2 Solid Waste Operations — Waste Generator Services (Shirley Garcia)

Routine waste operations services are coordinated and provided through Waste Generator Services. Day-to-day support to the project, such as packaging of waste, completing characterization documents, arranging for on site transportation, and responding to project developments are the responsibility of this organization.

2.3.3 Solid Waste Operations — Waste Treatment (Scott Kranker)

Receipt and size reduction of large components (gloveboxes and EB welder chambers) from the project are the responsibility of Waste Treatment. Waste Treatment will also provide technical support to project waste generators to ensure containers are packaged per waste operation procedures. In addition, any large scale movement of existing waste to free-up space for project activities would be performed by this organization.

2.3.4 Waste Disposal — Disposal Projects (Dean Lobdell)

Off site shipment of project wastes and materials for disposal, treatment, and recycling is the responsibility of Disposal Projects. This organization has the responsibility to prepare loads for off site shipment, maintain arrangements with off site capabilities for receipt of Rocky Flats

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Environmental Technology Site (RFETS) materials, and schedule these activities as necessary to support project requirements.

2.5 ENVIRONMENTAL COORDINATOR (EC) (Building 707: Jeff Widney)

The EC has the responsibility to coordinate with the Waste Management Liaison to handle building-specific issues related to environmental compliance and waste management. The EC works primarily in the field with the other designated Waste Management division personnel, such as technicians and inspectors, to insure that waste management activities are scheduled in a timely manner.

2.6 TRANSPORTATION MANAGER/REPRESENTATIVE (David Bryan)

The A and F Module Waste Generator Services personnel will coordinate waste transfer and pick-up schedules with a Transportation Representative assigned to the project. The Transportation Representative works with the Waste Management Liaison, Construction Superintendent, Waste Operations Representative, and EC to ensure that waste packages are transported in a timely manner to the appropriate treatment, storage, or disposal location. In some cases, wastes may be shipped directly off site for disposal. The Transportation group is responsible to insure that waste packages meet the requirements of the Department of Transportation (DOT) (49 CFR) for shipping of waste off site. This group is also responsible for the safe shipment of wastes on site from the point of generation to temporary staging or storage areas.

3.0 WASTE GENERATION

This section of the WMP includes a detailed description of the wastes that are to be generated by the project. Below is an outline of the volumes and types of wastes to be generated to include hazardous constituent characterization as well as radioisotope composition. Volumes for the amounts of LLW, mixed, hazardous, TRU, TRU mixed, recyclables, and clean waste are listed below based on preliminary estimates for the project, which can change due to site conditions or changes in decommissioning techniques. This section of the plan also includes a description of methods for segregation of wastes into appropriate Item Description Code (IDC) and possible methods of decontamination for some wastestreams.

The attached Non-Routine Waste Origination Log (NRWOL) outlines a total of 14 wastes (Attachment A) which will be generated as a result of the strip-out. Containers will be established within or near Modules A and F to segregate wastes by IDC. Crates will be set up to receive large pieces of piping and construction debris such as ducting and conduit, which will be surveyed and packaged as LLW.

The quantity and type of wastes that are expected to be generated as a result of this project are listed below:

<u>Low Level Waste (crates)</u>	57 crates	236 cu. yards	183 cubic meters
<u>TRU (drums)</u>	452 drums	124 cu. yards	95 cubic meters
<u>Low Level Mixed (lead)*</u>	8 drums	2.2 cu. yards	1.68 cubic meters
<u>Hazardous Waste (fluids/oils)</u>	1 drum	.274 cu. yard	<1 cubic meter

*Note: Low Level Mixed Waste (LLMW) in the form of lead and leaded windows will be generated as waste; however, the plans are to decontaminate the lead and arrange for recycling, if possible. NRWOLs include leaded gloves and windows.

Hazardous and mixed wastes such as lead and contaminated lead will be removed from the boxes prior to disposition. The intent is to remove and segregate all lead and outer surface materials such as Mycardia (plastic) from the gloveboxes while they are still in Building 707. The work will be conducted in High Efficiency Particulate Air filtered tents to control radioactive contamination levels during the operation.

A strippable paint will be used to decontaminate the boxes in an attempt to reduce contamination levels to a point where they can be classified as LLW. Gloveboxes GB A-110 and GB A-125 will then be size-reduced in place and packaged into standard crates for assay at Building 569. Buildings 779, 870, and 871 gloveboxes will be shipped to Building 707 for reuse.

4.0 WASTE CHARACTERIZATION

This section of the WMP describes the characterization requirements for the decommissioning project to meet requirements established by the RFETS *Hazardous Waste Requirements Manual*, the *Low-Level Waste Management Plan* and procedures, and the *RMRS Waste Acceptance Criteria*. Waste characterization is being accomplished by several methods including:

4.1 VISUAL INSPECTIONS

Facility walk-downs were conducted on April 16, 22, and again on May 2, 1996 to identify areas where samples would be taken for characterization and waste management purposes. The sampling and analysis requirements have been outlined in the Modules A and F Characterization Plans (see references).

4.2 USE OF PROCESS KNOWLEDGE

Information regarding process knowledge for the wastestreams associated with Modules A and F is found in the RFETS Waste Stream and Residue Identification and Characterization (WSRIC) Manual. Waste components that are not specifically captured by the WSRIC are addressed in the NRWOL section of the Integrated Work Control Program (IWCP) work package that generates the waste. A total of 14 IDCs have been initially identified in NRWOLs for the Project and are included in Attachment A. Note that additional NRWOL IDCs are anticipated to be encountered throughout project execution. Identification and disposition of these additional NRWOL record entries fall within the responsibility of SWO - Waste Generator Service, coordinated by SWO - Material Management. Given the specific nature of the NRWOL process, the NRWOL will have a higher hierarchical preference over the WSRIC.

4.3 CHARACTERIZATION SAMPLING

As described above, a characterization plan addressing required sampling and analysis for the gloveboxes has been completed. In addition, sampling of the liquid process lines associated with each box is being coordinated with the Analytical Projects Office (APO) and the Waste Operations group. Additional samples which have not been previously identified in the plan, may be required for further characterization as the project proceeds. Results of all sampling conducted will be compiled into a final characterization completion report for the project.

The APO coordinates the sampling requests with two (2) on site laboratories. Where Resource Conservation and Recovery Act (RCRA) characterization is required, *Test methods for Evaluating Solid Waste, Physical/Chemical Methods, U.S. Environmental Protection Agency SW-846, 1986, Third Edition* (or current version) is used for sampling and analysis. Process knowledge, quality control procedures, waste characterization, and WAC certification procedures are integrated into field procedures used to support characterization requirements. The specifics of the locations, types, and analysis requirements for the sampling activity is outlined in the Building 707 Characterization Plans for Modules A and F. Sampling surveys conducted to

establish DOT shipping requirements, identified in Attachment B, will be addressed and implemented via format directive issued by RMRS Waste Management at a later date.

4.4 NONDESTRUCTIVE EXAMINATION/NONDESTRUCTIVE ASSAY

During the progression of the project, various instruments will be utilized to perform "Hold Up" measurements (Gamma Spectroscopy) on the gloveboxes to estimate quantities of radioactive contamination present prior to and following decontamination of the boxes. Measurements will be performed on the gloveboxes (if there is material present when it is opened) and lateral duct work connecting the gloveboxes to the main header. A strippable paint will be used to decontaminate the boxes in an attempt to reduce contamination levels to a point where they can be classified as LLW. Note that the waste volumes listed in Section 2.0 reflect successful decontamination to low-level. The gloveboxes A-110 and A-125 will then be size-reduced in place and packaged into standard crates.

Once the boxes are packaged for disposal, they are assayed prior to being shipped from the site. RFETS utilizes NDA methods to assay drums and crates prior to shipment to determine levels of radioactivity for waste classification purposes. When the radionuclides in a volume of bulk material, typically contained in a drum, box, or tank emit gamma radiation, direct external measurements can identify and/or quantify the radioactive material inside. Gamma radiation is detected using plastic scintillators, sodium iodide crystals, or germanium crystals. RFETS has two (2) active units, a drum assay unit which is located in Building 371 and a crate assay unit, located in Building 569. For project crates which house gloveboxes that can not fit into the crate assay unit, radiological surveys will be used to estimate the residual activity.

Real-Time Radiography (RTR) is also utilized to examine the contents of drums prior to shipment. The container to be examined is placed between an X-ray tube and a detector (screen, image intensifier, and television camera). The image formed is viewed on a real-time basis so that motion, such as free liquids, can be detected by viewing the container. RTR provides additional information to assist in certification of the contents of a waste container prior to shipment.

4.5 RADIOCHEMISTRY

Radioactive analysis will be conducted for surface materials and liquids contained in the process lines, such as oil lines associated with pumps. The requested analyses consist of a radioactive scan for total activity, gross alpha/beta, and isotopics analysis for Plutonium 239. The results of the analysis will be received prior to the start of equipment and line removal. These results will also be used to further characterize the wastes generated.

5.0 DECOMMISSIONING PROJECT WASTE VERIFICATION

Waste verification activities are conducted by Waste Operations Inspectors assigned to the job. Waste characterization data and packaging requirements for LLW meet the requirements of the Nevada Test Site's (NTS) WAC (NVO-325). Procedures and policies for managing LLW are outlined in the RFETS LLW Management Plan.

Waste verification for TRU wastes is conducted by the Waste Operations group in accordance with the RFETS TRU WMP. Wastes are certified in accordance with the Waste Isolation Pilot Plant WAC and the TRU Package Transporter-II Authorized Methods for Payload Control Compliance Plan. Waste Inspectors are assigned to inspect waste packages generated from Building 707 Module A and F will be required on all shifts while the waste is "in process".

6.0 WASTE TREATMENT AND PACKAGING

Contaminated lead will be generated as a result of this project and managed as mixed waste. Due to inabilities of NDA instrumentation to assay bulk head, surface activity surveys, per plant

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radiation operations instructions, will be performed on all lead IDC containers. These surveys will be included in the waste traveler and noted in the traveler comments section. An effort to decontaminate and recycle lead components off site is pending. Any additional packaging requirements, pursuant to this effort, will be issued via field instructions to applicable IWCP work packages at a later date.

Liquid wastes drained from process lines may result in mixed wastes, if radioactive contamination is detected. These wastes will be treated in accordance with the treatability groupings for mixed wastes which have been established to support the RFETS Proposed Site Treatment Plan (Rev. 3, March 30, 1995). It is most likely that aqueous wastes, if contaminated, would be sent to Building 374 for treatment on site.

Release of clean material, debris, equipment, and facilities from a site contaminated with hazardous materials is accomplished by demonstrating that the wastes or materials do not exhibit any of the characteristics of hazardous waste under subpart D of 40 CFR 261 (6 CCR 1007-3,264) or is excluded under the provisions of subpart D. Process knowledge and operating history related to the facilities can also be used to segregate hazardous contaminant areas from unaffected areas.

Further sampling and analysis may be required during the project for various wastes to also determine if the wastes will be regulated as Land Disposal Restricted wastes, or if the wastes can be exempted under the "hazardous debris rule." Under this provision, and in accordance with the debris treatment standards (40 CFR 268.45), treated hazardous debris is excluded from the definition of hazardous waste, provided that the debris is treated to the performance or design and operation standards by an extraction or destruction technology and the treated debris does not exhibit the characteristic of a hazardous waste. The excluded debris can be disposed in an industrial landfill (subtitle D) rather than a RCRA permitted landfill (subtitle C). (Note that these exemptions apply to disposal of certain low-level radioactive mixed wastes, if they meet the receiving site's WAC for hazardous debris).

7.0 TEMPORARY STORAGE, TRANSPORTATION, AND FINAL DISPOSITION

LLW and LLMW generated by the Building 707 Module A and F Site Preparation Project will be packaged on a daily basis. Full waste crates will be packaged and shipped to Building 569 for assay and drums to Building 371. Waste Operations will designate the storage location for LLW outside the Protected Area. It is expected that the majority of LLW and TRU will be shipped to Building 664,440, and/or 991 for storage prior to off-site shipment.

For wastes that will not be shipped directly off site, interim storage locations will be designated by Waste Operations for storage of the wastes in on site storage facilities. LLMW will be stored in 90-Day Accumulation areas until shipped off site to a commercial contractor or to permitted on site storage. LLW will be shipped to on-site facilities for temporary storage until it can be shipped to NTS for final disposal. Waste Operations personnel will provide site surveillance support to insure that wastes are being managed at each storage facility in accordance with the conditions established by site requirements and the current RFETS Part B Permit.

The RFETS Transportation group will be involved with developing the requirements for off site transportation of waste to the selected disposal or treatment site. Appropriate procedures will be used to address shipping requirements and insure that waste shipments meet on site requirements, DOT regulations, and the receiving site's WAC.

8.0 WASTE MINIMIZATION

The management of Building 707 Module A and F wastes will be accomplished in a manner that minimizes the generation of such wastes. Waste minimization will be accomplished through a hierarchical approach to waste reduction by first eliminating or reducing the generation of decommissioning wastes through application of source reduction methods (e.g., use of non-hazardous decontamination agents), including input material changes, operational improvements, process changes, and administrative steps. Those potential waste materials that cannot be eliminated or minimized through source reduction will be minimized by recycling through reuse (e.g., lead, metals) or reclamation activities, or treating through compaction and stabilization processes, or packaging through segmentation (size reduction), nesting, and void space management techniques during packaging. Commercial waste processing facilities will be utilized, if appropriate, to minimize waste volume on a cost justification basis.

9.0 COMPLETION REPORT

Once the project has been completed, a project completion report will be prepared. This report will include a listing of the wastes removed from the module or building, characterization data, and a description of the disposition of the wastes and all activities (e.g., size reduction, decontamination, or treatment) which contributed to the final forms and volumes of the wastes resulting from this project.

10.0 REFERENCES

Transmittal of Final Data and Reports for Plutonium Holdup in Untoward Areas, Building 707-RDC-168-93, EG&G Rocky Flats, Inc. memorandum dated August 13, 1993.

Waste Stream and Residue Description and Characterization, Module A, Process Number 707-1, Waste Steam and Residue Identification and Characterization Manual 707-V5.0.

IWCP titled "Module A Utilities/Shielding Glovebox Disconnection" Work Control Number: 368400-02.

IWCP titled "NDA Miscellaneous Removal" Work Control Number: 368400-03

IWCP titled "Module A Utilities/Shielding Glovebox Disconnection and Carousel" Work Control Number: 368400-04.

IWCP titled "NDA Lifting/Size Reduction Crating Strip and Size Reduce Carousel" Work Control Number: 368400-07.

IWCP titled "Module A Lifting/Size Reduction/ Crating" Work Control Number: 368400-09.

Standard Work Package: "Deactivate Gloveboxes and Portions of the Chainveyors in Module "D", Building 707"; Work Control Number: TP077620.

Health and Safety Plan for A Module and NDA Demolition, Building 707, RFETS, Revision 0, April 1996.

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ATTACHMENT A
NON-ROUTINE WASTE ORIGINATION LOGS

(Note: Copies of this attachment will be made and inserted into the applicable section of the IWCP work package. Per W0-1103 the IWCP work control number and the output number will constitute the process number.)

October 3, 1996

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A Module, D Mod, E Mod, F Mod, G

NONROUTINE WASTE ORIGINATION LOG

WORK CONTROL # _____
 BUILDING _____ ROOM _____

PAGE _____ OF _____

WORK PERFORMED BY: _____

WORK PACKAGE TITLE: _____

OUT PUT #	DESCRIPTION	IDC/WFC	PROCESS #	RCRA HAZARDOUS? (Y/N)	RCRA CCC	NON-RCRA CCC	COMP. CODE	EPA CODE(S)	LDR CODE(S)	WASTE DESTINATION	RCRA CUSTODIAN EXT/PAGER	WASTE CONTACT DATE
1	Glovebox glass	339		Y	24	—	NA	D008	9	Regulated Unit (60-Day)	S. R. Garcia 5840/7204	
CHARACTERIZATION RATIONALE/COMMENTS Leaded glove box gloves contain lead above regulatory requirements of 50 ppm												
2	Glovebox windows	444		Y	04	—	NA	D005 D008	9	Regulated 90-day	same	
CHARACTERIZATION RATIONALE/COMMENTS Glovebox windows containing barium and lead above or equal to regulatory limits of 100 ppm for Barium & 5.0 for lead ppm												
3	Metal	480		N	NA	00	NA	NA	NA	waste storage	same	
CHARACTERIZATION RATIONALE/COMMENTS misc metal generated from non-lined generated equipment, pipes, etc. NO solvents utilized with metals.												

Plot 589 of

A Module, D Mod, t mod, f mod

NONROUTINE WASTE ORIGINATION LOG

WORK CONTROL # _____
 BUILDING _____ ROOM _____

PAGE _____ OF _____

WORK PERFORMED BY: _____

WORK PACKAGE TITLE: _____

OUT PUT #	DESCRIPTION	IDC/WFC	* PROCESS #	RCRA HAZARDOUS? (Y/N)	RCRA CCC	NON-RCRA CCC	COMP. CODE	EPA CODE(S)	LDR CODE(S)	WASTE DESTINATION	RCRA CUSTODIAN EXT/PAGER	WASTE CONTACT DATE
4	Metal	480		N	NA	00	NA	NA	NA	Waste Storage - 5K Garage TRU Waste 5840/7201		
CHARACTERIZATION RATIONALE/COMMENTS MISC metal generated from lined generated equipment or glove boxes with lead shielding removed.												
5.	Lead	321		Y	24	NA	NA	DA08	YES	RCRA regulated same Storage		
CHARACTERIZATION RATIONALE/COMMENTS Lead removed from gloveboxes greater than regulatory limits of 5.0 ppm												
6.	Plastic	337		N	NA	00	NA	NA	NA	Waste Storage same		
CHARACTERIZATION RATIONALE/COMMENTS Plastic generated from DED wats. No solvents utilized that carry RCRA codes												

* No Non-Routine Waste

EC/EPM Review/Approval _____

RF 47637 (6/95)

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A Module, Dmod, E-MOD, T-MOD

NONROUTINE WASTE ORIGINATION LOG

WORK CONTROL # _____
 BUILDING _____ ROOM _____

WORK PERFORMED BY: _____

WORK PACKAGE TITLE: _____ PAGE _____ OF _____

OUT PUT #	DESCRIPTION	IDC/WFC	PROCESS #	RCRA HAZARDOUS? (Y/N)	RCRA CCC	NON-RCRA CCC	COMP. CODE	EPA CODE(S)	LDR CODE(S)	WASTE DESTINATION	RCRA CUSTODIAN EXT./PAGER	WASTE CONTACT DATE
7	COOLANT	544		N	NA	00	YA	NA	NA	RAD STORAGE 5003	5040/724	
CHARACTERIZATION RATIONALE/COMMENTS COOLANT is to be fingerprinted to confirm waste stream along with MDA to confirm radioactivity. Analysis # _____ with performed to confirm waste stream. Analysis # _____ along with												
8	freon	544		TBD	TBD	TBD	YA	TBD	TBD	RAD STORAGE 5003		
CHARACTERIZATION RATIONALE/COMMENTS freon is to be fingerprinted to confirm type of freon along with MDA sampling to confirm radioactivity levels. Analysis # _____ was performed to confirm waste stream. pending type of freon, according to NRWC will be completed prior to waste generation.												
9	GLASS	440		N	NA	00	NA	NA	NA	RAD STORAGE	SAME	
CHARACTERIZATION RATIONALE/COMMENTS GLASS removed from gloveboxes that is line generated												

* No Non-Routine Was

EC/EPM Review/Approval

RF 47637 (695)

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A Module, D Mod, E Mod, F Mod

WORK PERFORMED BY: _____

NONROUTINE WASTE ORIGINATION LOG

WORK CONTROL # _____
 BUILDING _____ ROOM _____

WORK PACKAGE TITLE: _____ PAGE _____ OF _____

OUT. PUT #	DESCRIPTION	IDC/WFC	PROCESS #	RCRA HAZARDOUS? (Y/N)	RCRA CCC	NON-RCRA CCC	COMP. CODE	EPA CODE(S)	LDR CODE(S)	WASTE DESTINATION	RCRA CUSTODIAN EXT./PAGER	WASTE CONTACT DATE
10	Glovebox windows	444		Y	04 04	NA	NA	2004 D006	Y	RCRA storage Unit	5030304 5030304	
CHARACTERIZATION RATIONALE/COMMENTS glovebox windows contain level above or = to regulatory limits of 5.0ppm and barium of 100ppm												
11	Hepa filters	335		N	NA	00	NA	NA	NA	TRU WASTE Storage	same	
CHARACTERIZATION RATIONALE/COMMENTS Hepa filters removed from gloveboxes in mod A.												
12	Dry combustibles	330		N	NA	00	NA	NA	NA	WASTE STORAGE LLW	same	
CHARACTERIZATION RATIONALE/COMMENTS Dry combustibles generated from non-lined activities												

* No Non-Routine Waste Origination Log is required if the waste is identified with a Process Number in the applicable WSDIC Building Book.

EC/EPM Review/Approval _____

Print Name _____ Signature _____

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A Module, D MOP, EMOD, F MUD

WORK PERFORMED BY:

NONROUTINE WASTE ORIGINATION LOG

WORK CONTROL # _____
 BUILDING _____ ROOM _____

WORK PACKAGE TITLE:

PAGE _____ OF _____

OUT PUT #	DESCRIPTION	IDC/WFC	PROCESS #	RCRA HAZARDOUS? (Y/N)	RCRA CCC	NON-RCRA CCC	COMP. CODE	EPA CODE(S)	LDR CODE(S)	WASTE DESTINATION	RCRA CUSTODIAN EXT./PAGER	WASTE CONTACT DATE
13	Dry Combustibles	330		N	NA	00	NA	NA	NA	TEU Waste Storage	SE Garon 504/7724	
CHARACTERIZATION RATIONALE/COMMENTS												
Dry Combustibles generated from lined generated activities												
14	Scrap metal	NA		N	NA	00	NA	NA	NA	Phy D Landfill	SE Garon 504/7724	
CHARACTERIZATION RATIONALE/COMMENTS												
Storage cabinets that can be free-released will not be packaged, but disposed of at PHYD or Landfill												
15	granite slabs	374		N	NA	00	NA	NA	NA	Land Storage	same	
CHARACTERIZATION RATIONALE/COMMENTS												
Dense material, utilized 374 for NDA purposes.												

* No Non-Routine Waste
 EC/EPM Review/Approval

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Mod A, rcd D, MODE, MP F

NONROUTINE WASTE ORIGINATION LOG

WORK CONTROL # _____
 BUILDING _____ ROOM _____

PAGE _____ OF _____

WORK PERFORMED BY: _____

WORK PACKAGE TITLE: _____

OUT PUT #	DESCRIPTION	IDC/WFC	PROCESS #	RCRA HAZARDOUS? (Y/N)	RCRA CCC	NON-RCRA CCC	COMP. CODE	EPA CODE(S)	LDR CODE(S)	WASTE DESTINATION	RCRA CUSTODIAN EXT./PAGER	WASTE CONTACT DATE
16	Dry Combustibles w/ asbestos	330		N	NA	CO	NA	NA	NA	GCW	SP 641111 5812/7727	
CHARACTERIZATION RATIONALE/COMMENTS <i>Wallboard (dry combustibles) containing asbestos</i>												
17	light metal	540		N	NA	CO	NA	NA	NA	wide	same	
CHARACTERIZATION RATIONALE/COMMENTS <i>file cabinets containing asbestos</i>												
18	(misc. neutral waste solution) 505			Y	TBD	CO	4A	TBD	TBD	RCRA Unit D	same	
CHARACTERIZATION RATIONALE/COMMENTS <i>Waste has been sampled per APO # _____ and contains the following EPA codes.</i>												

* No Non-Routine Waste
 EC/EPM Review/Approval

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WORK PERFORMED BY: _____

NONROUTINE WASTE ORIGINATION LOG

WORK CONTROL # _____
 BUILDING _____ ROOM _____

WORK PACKAGE TITLE: _____

PAGE _____ OF _____

OUT PUT #	DESCRIPTION	IDC/WFC	PROCESS #	RCRA HAZARDOUS? (Y/N)	RCRA CCC	NON-RCRA CCC	COMP. CODE	EPA CODE(S)	LDR CODE(S)	WASTE DESTINATION	RCRA CUSTODIAN EXT/PAGER	WASTE CONTACT DATE
19	Fluorescents tubes	1908		Y	NA	NA	NA	D009	Y	Landfill	SLC/RAW 5/10/2004	
CHARACTERIZATION RATIONALE/COMMENTS Fluorescents light tube containing Hg at limits greater than or = to 0.2 ppm												
20	Incandescent bulbs	1938		Y	NA	NA	NA	D008	Y	Landfill	same	
CHARACTERIZATION RATIONALE/COMMENTS Incandescent bulbs containing lead at limits greater than or equal to 5 ppm												
21	Film	330		Y	NA	NA	NA	D011	Y	LLD Storage	same	
CHARACTERIZATION RATIONALE/COMMENTS Film containing Silver \geq to 5.0 ppm												

* No Non-Routine Waste Origination Log is required if the waste is identified with a Process Number in the applicable WSRIC Building Book.

EQ/EPM Review/Approval _____ Date _____ Employee No. _____ Ext. _____ Pager _____

Print Name _____ Signature _____

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P. J. ORG

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NONROUTINE WASTE ORIGINATION LOG

WORK CONTROL # _____
BUILDING _____ ROOM _____

WORK PERFORMED BY: _____

WORK PACKAGE TITLE: _____ PAGE _____ OF _____

OUT. PUT #	DESCRIPTION	IDC/ WFC	* PROCESS #	RCRA HAZARDOUS? (Y/N)	RCRA CCC	NON-RCRA CCC	COMP. CODE	EPA CODE(S)	LDR CODE(S)	WASTE DESTINATION	RCRA CUSTODIAN EXT./PAGER	WASTE CONTACT DATE
22	EXCESS CHEMICAL	534		N	NA	00	4A	NA	NA	SPUR	SCBARON 5842/7214	
23	fire blanket	334		N	NA	00	NA	NA	NA	waste storage	Same	

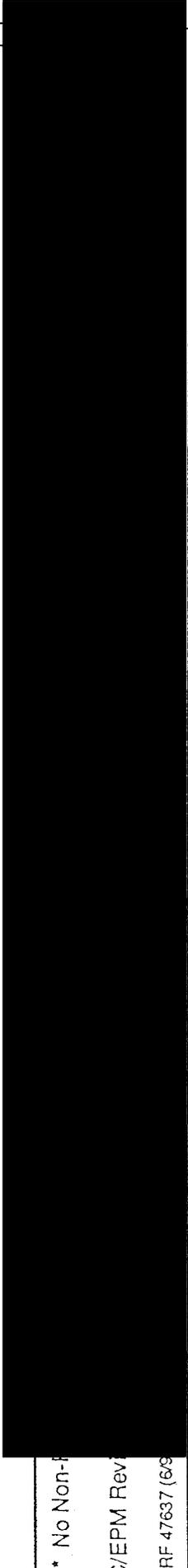
CHARACTERIZATION RATIONALE/COMMENTS

Turben oil, not regulated per MSDS.

CHARACTERIZATION RATIONALE/COMMENTS

24	+ w/flo filters	331										
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CHARACTERIZATION RATIONALE/COMMENTS



* No Non-
EC/EPM Rev
RF 47637 (6/8)

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