CORRES. CONTROL
OUTGOING LTR NO.

92RF 9544

0000006181

EG&G ROCKY FLATS

EG&G ROCKY FLATS, INC.
ROCKY FLATS PLANT, P.O. BOX 464, GOLDEN, COLORADO 80402-0464 • (303) 966-7000

DIST.	LTR	ENC
[illegible] MIN, A.		
BERMAN, H.S.		
BRANCH, D.B.		
CARNIVAL, G.J.		
COPP, R.D.		
DAVIS, J.G.		
EVERED, J.E.		
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GOODWIN, R.		
HANNI, B.J.		
HARMAN, L.K.		
HEALY, T.J.		
HILBIG, J.G.	X	X
DEKER, E.H.		
KERSH, J.M.	X	X
KIRBY, W.A.		
KUESTER, A.W.		
KRIEG, D.		
LEE, E.M.	X	
MAJESTIC, J.R.		
MARX, G.E.		
McDONALD, M.M.		
MORGAN, R.V.	X	X
POTTER, G.L.	X	X
RIZZUTO, V.M.	X	X
SANDLIN, N.B.		
SHEPLER, R.L.		
SULLIVAN, M.T.		
SWANSON, E.R.		
TALLMAN, K.G.		
VIEBE, J.S.		
WILKINSON, R.B.		
WILSON, J.M.		
YANE, J.O.		
[illegible] JKW	X	X
[illegible]	X	X
[illegible] C.D	X	X
[illegible] A.L.	X	X
[illegible] P.W	X	X
[illegible]-FROST	X	X
[illegible] M.C	X	X
[illegible] D.S	X	X
[illegible] M.J	X	X
[illegible] T.L.	X	X
[illegible] J.K	X	X
[illegible] J.	X	X
[illegible] D.R	X	X
[illegible] A	X	X
[illegible] J	X	X
[illegible] M	X	X
CORRES CONTROL	X	X
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CLASSIFICATION:

UCNI		
UNCLASSIFIED	X	X
CONFIDENTIAL		
SECRET		

AUTHORIZED CLASSIFIER SIGNATURE

C based on report and verbal [illegible]
DATE

IN REPLY TO RFP CC NO:
NONE

ACTION ITEM STATUS
☐ OPEN ☐ CLOSED
☐ PARTIAL

LTR APPROVED

ORIG & TYPIST INITIALS
JKW:par

6469 (Rev. 4/92)

August 13, 1992

92-RF-9544

ADMIN RECORD

Terry A. Vaeth
Manager
DOE, RFO

Attn: W. Rask

REVISED MIXED RESIDUE TANK SYSTEMS MANAGEMENT PLAN - ALS-311-92

Enclosed is a draft letter to the Colorado Department of Health (CDH) which transmits the Revised Mixed Residue Tank Systems Management Plan (plan), which is also enclosed. This revised plan is a requirement of Resource Conservation and Recovery Act (RCRA) Contingency Plan Implementation Report #92-011 which addresses a release from Tank D1414. This plan has been revised in accordance with your comments on the previously submitted revised plan dated July 31, 1992.

If you have any questions or require additional information, please contact Laurie Gregory-Frost at extension 5877 or John Wrapp at extension 5883.

A. L. Schubert, Acting Director
Waste Programs

JKW:par

Orig. and 1 cc - T. A. Vaeth

DOCUMENT CLASSIFICATION REVIEW WAIVER PER CLASSIFICATION OFFICE

Enclosures:
As Stated

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REVIEWED FOR CLASSIFICATION/UCNI
BY G. T. Ostdiek
DATE 8-19-93

A-SW-002212

DRAFT DRAFT DRAFT

Mr. Frederick Dowsett, PhD
Hazardous Materials and
Waste Management Division
Colorado Department of Health
4210 East 11th Avenue
Denver, Colorado 80220

REVISED MIXED RESIDUE TANK SYSTEMS MANAGEMENT PLAN

Enclosed is the Revised Mixed Residue Tank Systems Management Plan which has been revised to include changes in categories and schedules for mixed residue tanks which have occurred since submittal of the original plan on March 31, 1992. Resource Conservation and Recovery Act (RCRA) Contingency Plan Implementation Report #92-011 which addresses a release from Tank D1414 stated that an updated Mixed Residue Tank Systems Management Plan would be submitted by July 31, 1992.

The following is an explanation of each change identified in the updated plan:

1. Page 14 -- Due to a recent determination that Building 371 is not planned for future residue processing, the September 13, 1992 date for providing empty dates for those tanks in Category B needs to be extended. Several new options are being considered; however, additional time will be necessary to allow for a thorough evaluation. A letter will be submitted to the Colorado Department of Health by September 13, 1992 outlining the new options being considered and when a date will be available for emptying these tanks.

2. Page 14, Page 15 -- Tank D160B has been moved from Category C to Category A because liquid from the release in Room 1117 as identified in RCRA Contingency Plan Implementation Report #92-014 was collected in this tank. The new empty date for this tank is August 30, 1992 because the waste collected in this tank is considered newly generated, and therefore, will be removed within ninety days.

3. Page 14 , Page 16, Page 30 -- The correct capacity for Tanks D2A and D2B is approximately 819 gallons with a current inventory of 459 gallons. The original plan reflected 4850 gallons in error. In addition, the new empty date for Tank D2A is August 30, 1992 because the waste collected in this tank is considered newly generated, and therefore, will be removed within ninety days.

4. Page 14, Page 20 -- The empty date for Tanks T-5, T-6, and T-12 had been changed from July 1, 1992 to August 1, 1992. The reason for the change in this date was due to the extent of work required to empty these tanks. Piping needed to be re-routed and solutions circulated and filtered prior to shipping to Building 774 for processing. Also, decontamination of surrounding equipment and piping had to be completed prior to commencing work. These tanks were emptied on

July 31, 1992, and therefore, have been moved to Category C because the tanks are operationally empty and are destined for closure.

5. Page 15 -- Tank D44A6 was identified as Tank D44A3 in error in the original plan, therefore, Tank D44A6 has replaced Tank D44A3. Also, Tank D44B6 was omitted from the original plan in error and has been placed in Category C because it is operationally empty and is destined for closure.

6. Page 16 -- Tanks D157A, and D157B were omitted from the original plan in error. These tanks are RCRA regulated, but contain no inventory, and have been placed in Category C.

7. Page 18, Page 22 -- Tanks D1009, and D1011 have been moved from Category C to Category D because they contain inventory, and therefore, require permitting.

8. Page 19, Page 23 -- Tank D1804 has been changed from Category D to Category C because the tank has been emptied and is destined for closure.

9. Page 19, Page 24 -- Tanks D1406, D1407, and D1411 have been moved from Category D to Category C because these tanks are operationally empty and are destined for closure.

10. Page 24 -- Tanks D1414 and D1415 have been determined to be strictly reagent tanks, and therefore, are not regulated and will be removed from this plan.

11. Page 24 -- The ball mill washer and collection pan have been added to Category D. Both of these units are considered tanks and will require a permit for future use.

12. Page 34 -- Identification of a release from ancillary equipment associated with the D2 tanks requiring implementation of RCRA Contingency Plan Report #92-012.

13. Page 34, Page 35 -- Tank D160B has been deemed operational and is no longer identified as unfit-for-use.

14. Page 35 -- Identification of a release from Tank D160A requiring implementation of RCRA Contingency Plan Report #92-008.

15. Page 35 -- Identification of a release from ancillary equipment associated with Tanks D400A and D400C requiring implementation of RCRA Contingency Plan Report #92-010.

16. Page 35 -- Identification of a release from ancillary equipment associated with the D157 tanks and the D2 tanks requiring implementation of RCRA Contingency Plan Report #92-014.

17. Page 38 -- Identification of a release from Tank D1804 requiring implementation of RCRA Contingency Plan Report #92-007.

18. Page 38 -- Identification of a release from Tank D1414 which was initially thought to require implementation of a RCRA Contingency Plan. However, after further evaluation, it was determined that Tank D1414 was strictly a reagent tank, and therefore, is not regulated.

If you have any questions, please contact Warren Seyfert of my staff at 966-5925 or Allen Schubert of EG&G Rocky Flats, Inc. at 966-5251.

cc:
S. A. Anderson, EG&G Rocky Flats, Inc.
A. L. Schubert, EG&G Rocky Flats, Inc.
L. A. Gregory-Frost, EG&G Rocky Flats, Inc.
J. B. Mellon, EG&G Rocky Flats, Inc.

REVISED MIXED RESIDUE TANK SYSTEMS MANAGEMENT PLAN

REVISED MIXED RESIDUE TANK SYSTEMS MANAGEMENT PLAN

U. S. Department of Energy
Rocky Flats Plant

August 13, 1992

TABLE OF CONTENTS

1.0 INTRODUCTION

This plan has been prepared in accordance with the requirements of the draft Amended Compliance Order No. 91-07-31-01. This plan supersedes previous correspondence involving the management of Mixed Residue Tank Systems. The purpose of this document is to describe how the mixed residue tank systems at the Rocky Flats Plant (RFP) will be brought into compliance with Part 264, Subpart J of the Colorado Hazardous Waste Regulations (CHWR) found in 6 CCR 1007-3. This plan categorizes the tank systems, provides a compliance status for each tank system, addresses a management plan for all tank systems, and outlines the methods and schedules for achieving compliance for those tank systems which are to be included in the operating part of the state RCRA permit for Rocky Flats.

The methodology used to evaluate the compliance status of the mixed residue tank systems is described in Section 2.0. Terminology used in this compliance plan is defined in Section 3.0. The general assumptions and those used in defining the compliance standards are described in Section 4.0. Section 5.0 of this plan presents the tank tables which categorize the tank systems, provides the current inventory of solutions in the tanks, tank type, tank capacity, type of solution in the tanks, date for emptying the tanks, dates for submittal of closure plans, and compliance status. Section 6.0 identifies the corrective action steps necessary to correct the non-compliances, dates for when the non-compliance will be corrected, and an overall management plan for all tank systems.

2.0 METHODOLOGY

The identification of Mixed Residue Tank Systems is based on field work by Rocky Flats Plant employees and subcontractors. The basis for determining which tank systems are RCRA regulated was based upon process knowledge acquired through interviews with knowledgeable plant personnel.

Field investigations were conducted to determine the compliance status of each tank system with the requirements of Subpart J, of the CHWR 6 CCR 1007-3 . A checklist, listing the requirements of Subpart J, was prepared and completed for each tank system. This checklist can be provided at your request.

The inventory of liquid present is indicated for each tank system and was determined by visual inspection of the level-sensing device, or by process knowledge (operating records) where level-sensing devices were not present or believed to be inoperable or inaccurate. Liquid inventories identified do not include the volume of liquids which are likely to be suspended above the liquid level in the tanks. For example, liquid could be suspended above the liquid level by being trapped in the rings of Raschig ring filled tanks.

The physical status and compliance status of the tank systems were evaluated by either visual inspection, or interviews with knowledgeable personnel where access was restricted due to excessive radioactive contamination.

The priority for developing the closure plans is based on the severity of non-compliances for tank systems that are destined for closure. Therefore, closure plans will be submitted for Building 371 first, Building 771 second, and Buildings 707, 776, and 777 last.

The dates identified in this plan for correcting the non-compliances are based on the following criteria: radiological concerns, safety issues, the necessary time for the development of integrated work control packages which define the work to be conducted, and the time required to obtain funding.

The tank systems identified in this plan were previously identified as residue tanks because they contained predominantly residue material. However, due to changing operating conditions, many of the tanks in Buildings 371, 707, 771, 776, and 777 could contain low-level mixed or TRU mixed waste in the future. Tanks previously managed as 90-day tanks in Building 371 (D160A, D160B), Building 707 (V31, V100), and Building 771 (D923, D927, D921, D469, D975, D1023, D1014, D714, D950, D208, T80, T81, T82) contained either low-level or TRU mixed waste.

3.0 DEFINITIONS

ANCILLARY EQUIPMENT as defined in the Colorado Hazardous Waste Regulations (6 CCR 1007-3, Section 260.10) means " a device used to distribute, meter, or control the flow of hazardous waste from its point of generation to a storage or treatment tank(s), between hazardous waste storage and treatment tanks to a point of disposal onsite, or to a point of shipment for disposal off-site".

ANNULAR TANK is a double-walled tank in which liquid is contained between the inner and outer walls, and the core interior is hollow. This type of tank is critically safe by design.

MIXED RESIDUES are residues which have been mixed with listed hazardous waste or otherwise have the characteristics of a hazardous waste, as defined by the Colorado Hazardous Waste Regulations.

OPERATIONALLY EMPTY is defined as the condition of the tank following use of the existing installed system to remove as much of the material from the tank as is possible. Operationally empty tanks may contain varying amounts of material depending on tank system design.

PENCIL TANK is a long, narrow, cylindrical tank which is critically safe by design.

RASCHIG RINGS are borosilicate glass rings which are used as neutron absorbers within tanks. The rings are placed in tanks storing radioactive solutions to prevent criticality conditions from occurring.

RESIDUE is defined as a material containing concentrations of plutonium above the Economic Discard Limit (EDL) established by the Department of Energy (DOE) or containing concentrations of plutonium or other radionuclides which are determined to be economically feasible for recovery.

TANK SYSTEM includes the tank, associated ancillary equipment and secondary containment.

4.0 ASSUMPTIONS

4.1 GENERAL ASSUMPTIONS

- Tank system categories are defined in accordance with the most recent version of the draft Amended Compliance Order No. 91-07-31-01.

- Tank systems identified as "empty" in this report meet the definition of operationally empty.

- Information obtained through personnel interviews that cannot be field verified is assumed to be correct. This information includes: identification of the type of material in the tank systems, determination of which tanks are operationally empty, and capacities and inventories of the tanks.

- The category designations for specific tank systems identified in the tables (Section 5) are based on current plans for operations, including the processing of backlog mixed residue solutions. As these plans are modified or updated, specific tank systems may change categories; therefore, management of the tank systems will be changed accordingly.

- The tank inventories and tank capacity quantities shown on the tank category tables in Section 5 of this plan reflect either the design capacity or the physical capacity. Design capacity assumes no space in the tanks is taken up by Raschig rings. Physical capacity accounts for the space in the tanks taken up by Raschig rings which is estimated at approximately 33 percent.

- The necessary funding from the Department of Energy required to complete the tasks identified in this plan will be made available.

- Due to the amount of time, cost, impact to closure activities, and radiological exposure to workers resulting from the installation of physical controls (lock-outs, blanked piping) for these tank systems, administrative controls have been implemented to prevent any unwanted transfers from occurring. These administrative controls include the closing of valves on fill and drain lines, the implementation of shift orders which require approval from the Operations Manager before any transfers occur, or the powering down of control panels which activate air operated valves.

4.2 REGULATORY ASSUMPTIONS

The following assumptions were used in evaluating the compliance status of the Mixed Residue Tank Systems with Part 264, Subpart J, of the CHWR 6 CCR 1007-3. The following are RFP's interpretations of the requirements of Part 264 Subpart J of the CHWR that are not explicit. The additional requirements of Part 264 are explicit and no interpretation is included.

- **264.193 Containment and detection of releases.**

  A secondary containment system meeting the requirements of this Section is considered to be a containment system which is structurally sound (e.g., no cracks, gaps, or evidence of leaks), provided with an impermeable floor, of sufficient capacity to hold the contents of the largest tank in the room, and provided with a leak detection system capable of detecting a release or accumulated liquids within 24 hours. Visual inspections conducted once every 24 hours are considered to be adequate leak detection.

- **264.194 General operating requirements.**

Overfill prevention controls can consist of level-sensing devices, high-level alarms, automatic feed cutoff, or bypass to a standby tank or glovebox. One of these systems must be in place and operable to satisfy this requirement. Tank systems with non-calibrated electronic level gauges or level-sensing devices (high-level alarms) that cannot be calibrated or correctly tested are considered to have inadequate overfill prevention controls unless the tank system overfills to a standby tank or glovebox.

- **264.195 Inspections.**

Daily inspections of the tank system are required each operating day. Operating day is interpreted as meaning any day in which the tank system is transferring waste to or from the tank, storing waste, or treating waste. A tank which is operationally empty is not considered to be storing waste, and therefore, would not be considered under the requirements associated with operating days.

- **264.196 Response to leaks or spills and disposition of leaking or unfit-for-use-tank systems.**

In accordance with 6 CCR 1007-3, Section 264.196, releases must be removed from a tank system's secondary containment within 24 hours or in as timely a manner as is possible to prevent harm to human health or the environment. Not all hazardous waste releases can be removed from the secondary containment system within 24 hours due to radiological concerns. The released material will be removed in as timely a manner as is possible to prevent harm to human health and the environment. If the liquid from a release cannot be removed within 24 hours, or the quantity of waste released exceeds the Comprehensive Environmental Response,

Compensation and Liability Act (CERCLA) equivalent reportable quantity, the RCRA Contingency Plan will be implemented. The Colorado Department of Health (CDH) will be notified within 24 hours as required by the Plan. All releases from mixed residue tanks should remain inside the tank system's building which should provide protection to the environment. In the unlikely event that a release could impact the general public, the notification would be completed within one hour as outlined in the RFP Emergency Plan. A plan to remove the released material will be developed and submitted to CDH as part of the written follow-up report required by the RCRA Contingency Plan.

5.0 TANK CATEGORIES AND COMPLIANCE STATUS

INTRODUCTION

The tank category tables beginning in Section 5.1 of this plan identify the tank systems, provide information regarding the location , inventory, and contents of each tank, provide dates for emptying and submittal of closure plans, and identify the non-compliances that exist for each tank system. The categorization codes, compliance codes, tank type codes, and abbreviations used in these tables are summarized below.

TANK CATEGORIES

All Mixed Residue Tank Systems are placed into one of the following categories:

Category A Tank systems which currently have inventory, will be operationally empty by August 13, 1993, and are destined for closure.

Category B Tank systems which currently have inventory, will be included in the application (i.e. permit modification) for an operating permit, will not be operationally empty by August 13, 1993, and are destined for closure.

Category C Tank systems which are operationally empty and are destined for closure.

Category D Tank systems which are not destined for closure on or after August 13, 1993, and which will be included in the application (i.e. permit modification) for an operating permit.

Category E Tank systems which would operate as 90-day accumulation areas. (Note: Currently, no mixed residue tank systems are proposed for operation as 90-day accumulation areas.)

COMPLIANCE STATUS CODES

Tank systems which are considered to be in compliance with CHWR are identified with a blank in the compliance status section. The following codes used in the tank category tables identify the non-compliance(s) that exist for each tank system:

SC - Secondary containment is inadequate for the tank system.

OP - Overfill prevention controls are inadequate for the tank system.

IN - Visual inspections cannot be performed on the tank system due to excessive radioactive contamination. The tank systems identified with this non-compliance in the tank category tables are inaccessible due to excessive radioactive contamination.

LD - The leak detection system is inadequate for the tank because it does not have a leak detection device, or RFP is unable to conduct visual inspections within 24 hours due to excessive radioactive contamination.

TI - Non-compliant tank integrity indicates that the tank is unfit-for-use. Note: Refer to the building specific portion of this plan, beginning in Section 6.5, for the management plan for these tanks.

NEW TANK - Tank is new, has never been used, and will meet all requirements of the CHWR before being placed into service.

TANK TYPE CODES

The following codes are used in the tank category tables to identify the type of tank:

RR - Raschig ring tank

A - Annular tank

P - Pencil tank

LIST OF ACRONYMS AND ABBREVIATIONS

The following acronyms and abbreviations are used in the tank category tables:

ASRF	Advance Size Reduction Facility
CCl4	Carbon Tetrachloride
HCl	Hydrochloric Acid
HNO3	Nitric Acid
H2O	Water
KOH	Potassium Hydroxide
Pu	Plutonium
Sol	Solution
SRV	Size Reduction Vault
TCA	Trichloroethane
U	Uranium
N/A	Not applicable

5.1 CATEGORY A TANKS

Tank systems which currently have inventory, will be operationally empty by August 13, 1993 and are destined for closure.

Building	Room	Tank	Tank Type	Approximate Inventory (Gallons)	Capacity (Gallons)	Contents	Empty Date	Date for Submittal Of Closure Plan	Compliance Status
371	1115	D160B	RR	363	1813	HCl/KOH	8/30/92	9/13/92	SC,TI
371	1117	D2A	RR	459	819	Caustic Solution	8/30/92	9/13/92	SC,IN,LD, TI
~~777~~	~~134A~~	~~T-5~~	~~P~~	~~2~~	~~2~~	~~CCl4/Oil~~	~~7/1/92~~	~~4/13/93~~	~~SC~~
							8/1/92		
~~777~~	~~134A~~	~~T-6~~	~~P~~	~~2~~	~~2~~	~~CCl4/Oil~~	~~7/1/92~~	~~4/13/93~~	~~SC~~
							8/1/92		
~~777~~	~~134A~~	~~T-12~~	~~P~~	~~1~~	~~2~~	~~CCl4/Oil~~	~~7/1/92~~	~~4/13/93~~	~~SC,TI~~
							8/1/92		

5.2 CATEGORY B TANKS

Tank systems which currently have inventory, will be included in the application (i.e., permit modification) for an operating permit, will not be operationally empty by August 13, 1993, and are destined for closure.

Building	Room	Tank	Tank Type	Approximate Inventory (Gallons)	Capacity (Gallons)	Contents	Empty Date	Date for Submittal Of Closure Plan	Compliance Status
371	3559	D55A	RR	328	455	HNO3/Pu	*	9/13/92	SC,IN,LD
371	3559	D55B	RR	36	455	HNO3/Pu	*	9/13/92	SC,IN,LD
371	3563	D49B	RR	647	1011	HNO3/Pu	*	9/13/92	SC,IN,LD
371	3563	D49C	RR	303	1011	HNO3/Pu	*	9/13/92	SC,IN,LD
371	3563	D49D	RR	586	1011	HNO3/Pu	*	9/13/92	SC,IN,LD

* Currently, it is unknown whether the solutions in these tanks will be processed in Building 771 or await the resumption of Building 371 allowing the solutions to be processed there. A schedule will be provided to the Colorado Department of Health on September 13, 1992 regarding when these tanks will be emptied.

5.3 CATEGORY C TANKS

Tank systems which are operationally empty and are destined for closure.

Building	Room	Tank	Tank Type	Approximate Inventory (Gallons)	Capacity (Gallons)	Contents	Empty Date	Date for Submittal Of Closure Plan	Compliance Status
371	1107	D44A1	P	Empty	13	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	1107	D44A2	P	Empty	13	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	1107	D44A3	P	Empty	13	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	1107	D44A4	P	Empty	13	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	1107	D44A5	P	Empty	13	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	1107	D44A6	P	Empty	13	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	1107	D44B1	P	Empty	13	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	1107	D44B2	P	Empty	13	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	1107	D44B3	P	Empty	13	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	1107	D44B4	P	Empty	13	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	1107	D44B5	P	Empty	13	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	1107	D44B6	P	Empty	13	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	1109	D43A1	P	Empty	11	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	1109	D43A2	P	Empty	11	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	1109	D43A3	P	Empty	11	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	1109	D43A4	P	Empty	11	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	1109	D43A5	P	Empty	11	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	1109	D43B1	P	Empty	11	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	1109	D43B2	P	Empty	11	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	1109	D43B3	P	Empty	11	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	1109	D43B4	P	Empty	11	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	1109	D43B5	P	Empty	11	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	1115	D160A	RR	Empty	1813	HCl/KOH	N/A	9/13/92	SC,TI
371	1115	D160B	RR	Empty	1813	HCl/KOH	N/A	9/13/92	SC,TI
371	1115	D189	P	Empty	1	HNO3/Pu	N/A	9/13/92	

CATEGORY C TANKS (CONT)

Building	Room	Tank	Tank Type	Approximate Inventory (Gallons)	Capacity (Gallons)	Contents	Empty Date	Date for Submittal Of Closure Plan	Compliance Status
371	1115	D400A	RR	Empty	224	Caustic/HNO3	N/A	9/13/92	SC
371	1115	D400B	RR	Empty	224	HNO3	N/A	9/13/92	SC
371	1115	D400C	RR	Empty	224	HNO3	N/A	9/13/92	SC
371	1117	D2B	RR	Empty	819	Caustic Solution	N/A	9/13/92	SC,IN,LD
371	1117	D157A	RR	Empty	1149	Caustic Solution	N/A	9/13/92	SC,IN,LD
371	1117	D157B	RR	Empty	1149	Caustic Solution	N/A	9/13/92	SC,IN,LD
371	3517	T132A	RR	Empty	1446	HNO3/Pu	N/A	9/13/92	SC
371	3517	T132B	RR	Empty	1446	HNO3/Pu	N/A	9/13/92	SC
371	3517	T132C	RR	Empty	1446	HNO3/Pu	N/A	9/13/92	SC
371	3549	D173A	P	Empty	16	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	3549	D173B	P	Empty	16	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	3553	D72A	P	Empty	31	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	3553	D72B	P	Empty	31	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	3559	D50A	RR	Empty	455	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	3559	D50B	RR	Empty	455	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	3559	D51A	RR	Empty	22	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	3559	D51B	RR	Empty	22	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	3559	D59	RR	Empty	688	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	3559	D69A	RR	Empty	240	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	3559	D69B	RR	Empty	240	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	3559	D69C	RR	Empty	240	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	3563	D49A	RR	Empty	1011	HNO3/Pu	N/A	9/13/92	SC,IN,LD
371	3563	D52A	RR	Empty	1011	HNO3 Recycled Sol.	N/A	9/13/92	SC,IN,LD
371	3563	D52B	RR	Empty	1011	Recycled Solution	N/A	9/13/92	SC,IN,LD
371	3571	D151	RR	Empty	211	Acid Fumes	N/A	9/13/92	SC
371	3571	D152A	RR	Empty	1400	HNO3/Pu	N/A	9/13/92	SC
371	3571	D152B	RR	Empty	1400	HNO3/Pu	N/A	9/13/92	SC
371	3573	D134A	RR	Empty	942	HNO3/Pu	N/A	9/13/92	SC

CATEGORY C TANKS (CONT)

Building	Room	Tank	Tank Type	Approximate Inventory (Gallons)	Capacity (Gallons)	Contents	Empty Date	Date for Submittal Of Closure Plan	Compliance Status
371	3573	D134B	RR	Empty	942	HNO3/Pu	N/A	9/13/92	SC
371	3573	D134C	RR	Empty	942	HNO3/Pu	N/A	9/13/92	SC
371	3573	D135A	RR	Empty	942	HNO3/Pu	N/A	9/13/92	SC
371	3573	D135B	RR	Empty	942	Acid Solution	N/A	9/13/92	SC
371	3573	D289A	RR	Empty	455	HNO3/Pu	N/A	9/13/92	SC
371	3573	D289B	RR	Empty	455	Acid Solvent	N/A	9/13/92	SC
371	3573	D289C	RR	Empty	455	Acid Solvent	N/A	9/13/92	SC
771	114	D503	P	Empty	8	HNO3/Pu	N/A	12/13/92	SC,TI
771	114	D504	P	Empty	8	HNO3/Pu	N/A	12/13/92	SC,TI
771	114	D505	P	Empty	8	HNO3/Pu	N/A	12/13/92	SC,TI
771	114	D506	P	Empty	8	HNO3/Pu	N/A	12/13/92	SC,TI
771	114	D529	P	Empty	8	HNO3/Pu	N/A	12/13/92	SC
771	114	D530	P	Empty	8	HNO3/Pu	N/A	12/13/92	SC
771	114	D609	P	Empty	21	Nitric/Sulfuric	N/A	12/13/92	SC,TI
771	114	D610	P	Empty	21	Nitric/Sulfuric	N/A	12/13/92	SC,TI
771	114	D713	RR	Empty	125	Spent Caustic	N/A	12/13/92	SC
771	114	D714	RR	Empty	125	Spent Caustic	N/A	12/13/92	SC
771	114	D507	P	Empty	6	HNO3/Pu	N/A	12/13/92	
771	114	D508	P	Empty	6	HNO3/Pu	N/A	12/13/92	
771	114	D509	P	Empty	8	HNO3/Pu	N/A	12/13/92	SC
771	114	D510	P	Empty	8	HNO3/Pu	N/A	12/13/92	SC
771	114	D715	RR	Empty	71	Acid/Americium	N/A	12/13/92	SC
771	114	D716	RR	Empty	71	Acid/Americium	N/A	12/13/92	SC
771	114	D764	RR	Empty	71	Acid/Americium	N/A	12/13/92	SC
771	114	D765	RR	Empty	69	Acid/Americium	N/A	12/13/92	SC
771	146	D1003	P	Empty	8	Pu/U/HNO3	N/A	12/13/92	SC,TI
771	146	D1004	P	Empty	8	Pu/U/HNO3	N/A	12/13/92	SC,TI
771	146	D1005	P	Empty	8	Pu/U/HNO3	N/A	12/13/92	SC,TI

CATEGORY C TANKS (CONT)

Building	Room	Tank	Tank Type	Approximate Inventory (Gallons)	Capacity (Gallons)	Contents	Empty Date	Date for Submittal Of Closure Plan	Compliance Status
771	146	D1006	P	Empty	8	Pu/U/HNO3	N/A	12/13/92	SC,TI
771	146	D1019	P	Empty	8	Neptunium Solution	N/A	12/13/92	SC
771	146	D1020	P	Empty	8	Neptunium Solution	N/A	12/13/92	SC
771	146	D1024	RR	Empty	80	HNO3/Pu	N/A	12/13/92	SC
771	146	D1062	P	Empty	3	U/HNO3	N/A	12/13/92	SC
771	146	D1063	P	Empty	3	U/HNO3	N/A	12/13/92	SC
771	146	D1007	RR	Empty	51	Pu/U/HNO3	N/A	12/13/92	SC
~~771~~	~~146~~	~~D1009~~	~~P~~	~~Empty~~	~~8~~	~~Pu/U/HNO3~~	~~N/A~~	~~12/13/92~~	~~SC~~
~~771~~	~~146~~	~~D1011~~	~~P~~	~~Empty~~	~~8~~	~~Pu/U/HNO3~~	~~N/A~~	~~12/13/92~~	~~SC~~
771	146	D1014	RR	Empty	82	Pu/U/HNO3	N/A	12/13/92	SC
771	146	D1023	RR	Empty	80	Pu/U/HNO3	N/A	12/13/92	SC
771	146	D1032	P	Empty	3	Pu/U/HNO3	N/A	12/13/92	SC
771	146	D1064	P	Empty	3	Pu/U/HNO3	N/A	12/13/92	SC
771	146	D1065	P	Empty	3	Pu/U/HNO3	N/A	12/13/92	SC
771	146	D1066	P	Empty	3	Pu/U/HNO3	N/A	12/13/92	SC
771	149	D208	RR	Empty	59	Pu Chloride	N/A	12/13/92	SC
771	149	D362	RR	Empty	59	Pu Chloride	N/A	12/13/92	SC
771	149	D363	RR	Empty	59	Pu Chloride	N/A	12/13/92	SC
771	149	D468	RR	Empty	51	HNO3/Pu	N/A	12/13/92	SC
771	149	D472	RR	Empty	47	HNO3/Pu	N/A	12/13/92	SC,TI
771	149	D630	P	Empty	12	KOH	N/A	12/13/92	SC
771	149	D631	P	Empty	12	KOH	N/A	12/13/92	SC
771	149	D928	P	Empty	3	Spent Caustic	N/A	12/13/92	SC
771	149	D971	RR	Empty	139	HNO3/Pu	N/A	12/13/92	SC
771	149	D972	RR	Empty	144	HNO3/Pu	N/A	12/13/92	SC
771	149	D976	RR	Empty	104	HNO3/Pu	N/A	12/13/92	SC
771	149	D177	RR	Empty	53	KOH	N/A	12/13/92	SC,TI
771	149	D203	RR	Empty	59	Pu Chloride/Nitrate	N/A	12/13/92	SC

CATEGORY C TANKS (CONT)

Building	Room	Tank	Tank Type	Approximate Inventory (Gallons)	Capacity (Gallons)	Contents	Empty Date	Date for Submittal Of Closure Plan	Compliance Status
771	149	D204	RR	Empty	59	Pu Chloride/Nitrate	N/A	12/13/92	SC
771	149	D205	RR	Empty	59	Pu Chloride/Nitrate	N/A	12/13/92	SC
771	149	D206	RR	Empty	59	Pu Chloride/Nitrate	N/A	12/13/92	SC
771	149	D207	RR	Empty	57	Pu Chloride/Nitrate	N/A	12/13/92	SC
771	149	D218	RR	Empty	57	Pu Chloride/Nitrate	N/A	12/13/92	SC
771	149	D219	RR	Empty	57	Pu Chloride/Nitrate	N/A	12/13/92	SC
771	149	D466	RR	Empty	56	HNO3/Pu	N/A	12/13/92	SC
771	149	D469	RR	Empty	60	HNO3/Pu	N/A	12/13/92	SC,TI
771	149	D470	RR	Empty	61	HNO3/Pu	N/A	12/13/92	SC,TI
771	149	D975	RR	Empty	141	HNO3/Pu	N/A	12/13/92	SC,TI
771	153	T86	P	Empty	13	Spent Caustic	N/A	12/13/92	SC
771	153	T87	P	Empty	13	Caustic	N/A	12/13/92	SC
771	153	T88	P	Empty	13	Caustic	N/A	12/13/92	SC
771	174	D1082	P	Empty	51	Pu/U/HNO3	N/A	12/13/92	SC
771	174	D1083	RR	Empty	24	Pu/U/HNO3	N/A	12/13/92	SC
771	174	D1087	P	Empty	14	Pu/U/HNO3	N/A	12/13/92	SC
771	174	D1088	P	Empty	14	Pu/U/HNO3	N/A	12/13/92	SC
771	**180A**	**D1804**	**P**	**Empty**	**4**	**HNO3/Pu**	**N/A**	**6/30/92**	**SC, TI**
771	181A	D1401	A	Empty	32	Uranyl Nitrate	N/A	12/13/92	SC
771	181A	D1402	A	Empty	32	Uranyl Nitrate	N/A	12/13/92	SC
771	**181A**	**D1406**	**P**	**Empty**	**14**	**Strip Solution**	**N/A**	**6/30/92**	**SC**
771	**181A**	**D1407**	**P**	**Empty**	**14**	**Strip Solution**	**N/A**	**6/30/92**	**SC**
771	181A	D1409	P	Empty	14	Uranium Sulfate	N/A	12/13/92	SC
771	181A	D1410	P	Empty	14	Ammonium Sulfate	N/A	12/13/92	SC
771	**181A**	**D1411**	**P**	**Empty**	**14**	**Ammoniumn Sulfate**	**N/A**	**6/30/92**	**SC**
777	131	DL776	RR	Empty	125	Oil	N/A	4/13/93	SC
777	131	T1103	RR	Empty	172	CCl4/Freon/Oil	N/A	4/13/93	SC
777	131	T1104	RR	Empty	172	CCl4/Freon/Oil	N/A	4/13/93	SC

CATEGORY C TANKS (CONT)

Building	Room	Tank	Tank Type	Approximate Inventory (Gallons)	Capacity (Gallons)	Contents	Empty Date	Date for Submittal Of Closure Plan	Compliance Status
777	131	T1106	RR	Empty	138	CCl4/Freon/Oil	N/A	4/13/93	SC
777	134A	T-5	P	Empty	22	CCl4/Oil	8/1/92	4/13/93	SC
777	134A	T-6	P	Empty	22	CCl4/Oil	8/1/92	4/13/93	SC
777	134A	T7	P	Empty	5	CCl4/Oil	N/A	4/13/93	SC
777	134A	T8	P	Empty	1	CCl4/Oil	N/A	4/13/93	SC
777	134A	T9	P	Empty	1	CCl4/Oil	N/A	4/13/93	SC
777	134A	T-10	P	Empty	22	CCl4/Oil	N/A	4/13/93	SC
777	134A	T-11	P	Empty	22	CCl4/Oil	N/A	4/13/93	SC
777	134A	T-12	P	Empty	22	CCl4/Oil	8/1/92	4/13/93	SC,TI
777	430	T1	RR	Empty	159	TCA	N/A	4/13/93	SC,TI
777	430	T2	RR	Empty	172	TCA	N/A	4/13/93	SC,TI
777	430	T3	P	Empty	2	CCl4/Oil	N/A	4/13/93	SC
777	430	T4	P	Empty	2	CCl4/Oil	N/A	4/13/93	SC

5.4 CATEGORY D TANKS

Tank systems which will not be destined for closure on or after August 13, 1993, and which will be included in the application (i.e., permit modification) for an operating permit.

Building	Room	Tank	Tank Type	Approximate Inventory (Gallons)	Capacity (Gallons)	Contents	Empty Date	Date for Submittal Of Closure Plan	Compliance Status
371	1103	D2401A	A	Never Used	192	KOH/Pu/HNO3/HCl	N/A	6/30/92	NEW TANK
371	1103	D2401B	A	Never Used	192	KOH/Pu/HNO3/HCl	N/A	6/30/92	NEW TANK
371	1103	D2401C	A	Never Used	192	KOH/Pu/HNO3/HCl	N/A	6/30/92	NEW TANK
371	1103	D2401D	A	Never Used	192	KOH/Pu/HNO3/HCl	N/A	6/30/92	NEW TANK
371	1103	D2402A	A	Never Used	192	KOH/Pu/HNO3/HCl	N/A	6/30/92	NEW TANK

CATEGORY D TANKS (CONT)

Building	Room	Tank	Tank Type	Approximate Inventory (Gallons)	Capacity (Gallons)	Contents	Empty Date	Date for Submittal Of Closure Plan	Compliance Status
371	1103	D2402B	A	Never Used	192	KOH/Pu/HNO3/HCl	N/A	6/30/92	NEW TANK
371	1103	D2403	A	Never Used	192	KOH/Pu/HNO3/HCl	N/A	6/30/92	NEW TANK
371	1127	D293A	RR	630	900	KOH/Pu/HCl	N/A	6/30/92	SC, OP
371	1127	D293B	RR	36	900	KOH/Pu/HCl	N/A	6/30/92	SC
371	2223	D934A	RR	40	1533	HNO3/HCl/KOH/Pu	N/A	6/30/92	SC
371	2223	D934B	RR	Empty	1533	HNO3/HCl/KOH/Pu	N/A	6/30/92	SC
371	2317	D292A	RR	184	1533	KOH/Pu	N/A	6/30/92	SC
371	2317	D292B	RR	307	1533	KOH/Pu	N/A	6/30/92	SC
707	C-Pit	V-1	P	Empty	6	CCl4/Freon/Oil	N/A	6/30/92	
707	C-Pit	V-2	P	Empty	6	CCl4/Freon/Oil	N/A	6/30/92	
707	C-Pit	V-3	P	Empty	6	CCl4/Freon/Oil	N/A	6/30/92	
707	C-Pit	V-4	P	Empty	6	CCl4/Freon/Oil	N/A	6/30/92	
707	C-Pit	V-5	P	Empty	6	CCl4/Freon/Oil	N/A	6/30/92	
707	C-Pit	V-6	P	Empty	6	CCl4/Freon/Oil	N/A	6/30/92	
707	C-Pit	V-7	P	Empty	6	CCl4/Freon/Oil	N/A	6/30/92	
707	C-Pit	V-8	P	Empty	6	CCl4/Freon/Oil	N/A	6/30/92	
707	C-Pit	V-12	P	Empty	6	CCl4/Freon/Oil	N/A	6/30/92	
707	C-Pit	V-13	P	Empty	6	CCl4/Freon/Oil	N/A	6/30/92	
707	C-Pit	V-14	P	Empty	6	CCl4/Freon/Oil	N/A	6/30/92	
707	C-Pit	V-15	P	Empty	6	CCl4/Freon/Oil	N/A	6/30/92	
707	C-Pit	V-16	P	Empty	6	CCl4/Freon/Oil	N/A	6/30/92	
707	C-Pit	V-17	P	Empty	6	CCl4/Freon/Oil	N/A	6/30/92	
707	C-Pit	V-18	P	Empty	6	CCl4/Freon/Oil	N/A	6/30/92	
707	C-Pit	V-19	P	Empty	6	CCl4/Freon/Oil	N/A	6/30/92	
707	C-Pit	V-30	A	Empty	159	CCl4/Freon/Oil	N/A	6/30/92	
707	C-Pit	V-31	A	Empty	156	CCl4/Freon/Oil	N/A	6/30/92	
707	C-Pit	V-100	RR	Empty	74	TCA	N/A	6/30/92	
771	114	D544	A	Empty	43	HNO3/Pu	N/A	6/30/92	SC

CATEGORY D TANKS (CONT)

Building	Room	Tank	Tank Type	Approximate Inventory (Gallons)	Capacity (Gallons)	Contents	Empty Date	Date for Submittal Of Closure Plan	Compliance Status
771	114	D545	A	Empty	40	HNO3/Pu	N/A	6/30/92	SC
771	114	D546	A	Empty	43	HNO3/Pu	N/A	6/30/92	SC
771	114	D547	A	Empty	43	HNO3/Pu	N/A	6/30/92	SC
771	114	D548	A	Empty	68	HNO3/Pu	N/A	6/30/92	SC
771	114	D549	A	Empty	67	HNO3/Pu	N/A	6/30/92	SC
771	114	D550	A	59	67	HNO3/Pu	N/A	6/30/92	SC
771	114	D551	A	39	67	HNO3/Pu	N/A	6/30/92	SC
771	114	D552	A	Empty	68	HNO3/Pu	N/A	6/30/92	SC
771	114	D553	A	Empty	85	HNO3/Pu	N/A	6/30/92	SC
771	114	D554	A	Empty	82	HNO3/Pu	N/A	6/30/92	SC
771	114	D949	A	Empty	56	HNO3/Pu	N/A	6/30/92	SC
771	114	D950	A	Empty	60	HNO3/Pu	N/A	6/30/92	SC
771	114	D951	A	Empty	59	HNO3/Pu	N/A	6/30/92	SC
771	114	D952	A	3	57	HNO3/Pu	N/A	6/30/92	SC
771	114	D953	A	Empty	57	HNO3/Pu	N/A	6/30/92	SC
771	114	D954	A	Empty	57	HNO3/Pu	N/A	6/30/92	SC
771	114	D955	A	Empty	59	HNO3/Pu	N/A	6/30/92	SC
771	114	D500	P	Empty	8	HNO3/Pu	N/A	6/30/92	SC,TI
771	114	D501	P	Empty	8	HNO3/Pu	N/A	6/30/92	SC,TI
771	114	D502	P	Empty	8	HNO3/Pu	N/A	6/30/92	SC,TI
771	114	D705	RR	25	102	Spent Caustic	N/A	6/30/92	SC
771	114	D706	RR	90	102	Spent Caustic	N/A	6/30/92	SC
771	146	D1001	P	3	8	Pu/U/HNO3	N/A	6/30/92	SC,TI
771	146	D1002	P	6	8	Pu/U/HNO3	N/A	6/30/92	SC,TI
771	146	D1008	RR	Empty	80	Pu/U/HNO3	N/A	6/30/92	SC
771	**146**	**D1009**	**P**	**4**	**8**	**Pu/U/HNO3**	**N/A**	**12/13/92**	**SC**
771	146	D1010	P	8	8	Pu/U/HNO3	N/A	6/30/92	SC
771	**146**	**D1011**	**P**	**7**	**8**	**Pu/U/HNO3**	**N/A**	**12/13/92**	**SC**

CATEGORY D TANKS (CONT)

Building	Room	Tank	Tank Type	Approximate Inventory (Gallons)	Capacity (Gallons)	Contents	Empty Date	Date for Submittal Of Closure Plan	Compliance Status
771	146	D1012	P	7	8	Pu/U/HNO3	N/A	6/30/92	SC
771	146	D1013	RR	45	80	Pu/U/HNO3	N/A	6/30/92	SC
771	146	D1022	RR	69	77	Pu/U/HNO3	N/A	6/30/92	SC
771	149	D360	RR	1	59	PU Chloride	N/A	6/30/92	SC
771	149	D361	RR	1	59	PU Chloride	N/A	6/30/92	SC
771	149	D364	A	Empty	40	HNO3/Pu	N/A	6/30/92	SC
771	149	D451	RR	13	88	HNO3/Pu	N/A	6/30/92	SC
771	149	D452	RR	131	141	HNO3/Pu	N/A	6/30/92	SC
771	149	D453	RR	Empty	141	HNO3/Pu	N/A	6/30/92	SC,TI
771	149	D454	RR	50	114	HNO3/Pu	N/A	6/30/92	SC,TI
771	149	D467	RR	56	56	HNO3/Pu	N/A	6/30/92	SC
771	149	D931	A	61	89	HNO3/Pu	N/A	6/30/92	SC
771	149	D932	A	Empty	86	HNO3/Pu	N/A	6/30/92	SC
771	149	D933	A	30	59	HNO3/Pu	N/A	6/30/92	SC
771	149	D934	A	Empty	56	HNO3/Pu	N/A	6/30/92	SC
771	149	D973	RR	9	57	HNO3/Pu	N/A	6/30/92	SC
771	149	D980	RR	Empty	39	Spent Acid	N/A	6/30/92	SC
771	149	D921	RR	Empty	93	Spent Caustic	N/A	6/30/92	SC
771	149	D922	RR	Empty	93	Spent Caustic	N/A	6/30/92	SC
771	149	D923	RR	Empty	561	H2O/ Spent Caustic	N/A	6/30/92	SC
771	149	D927	RR	Empty	508	H2O/ Spent Caustic	N/A	6/30/92	SC
771	149	D974	RR	Empty	63	HNO3/Pu	N/A	6/30/92	SC
771	174	D1081	RR	11	55	Pu/U/HNO3	N/A	6/30/92	SC
771	180A	D1803	P	Empty	11	HNO3/Pu	N/A	6/30/92	
~~771~~	~~180A~~	~~D1804~~	~~P~~	~~1~~	~~4~~	~~HNO3/Pu~~	~~N/A~~	~~6/30/92~~	~~SC, TI~~
771	180A	D1805	P	Empty	4	HNO3/Pu	N/A	6/30/92	SC
771	180A	D1809	A	Empty	77	Distillate	N/A	6/30/92	SC
771	180A	D1810	A	39	69	HNO3/Pu	N/A	6/30/92	SC

CATEGORY D TANKS (CONT)

Building	Room	Tank	Tank Type	Approximate Inventory (Gallons)	Capacity (Gallons)	Contents	Empty Date	Date for Submittal Of Closure Plan	Compliance Status
771	180A	D1811	A	Empty	77	HNO3/Pu	N/A	6/30/92	SC
771	180A	D1813	P	Empty	7	HNO3/Pu	N/A	6/30/92	SC
771	180A	D1816	P	Empty	7	Distillate	N/A	6/30/92	SC
771	180A	D1817	P	Empty	7	Distillate	N/A	6/30/92	SC
771	180A	D1818	P	Empty	8	Distillate	N/A	6/30/92	SC
771	180A	D1819	P	Empty	8	Distillate	N/A	6/30/92	SC
771	180K	T80	RR	Empty	16	Distillate	N/A	6/30/92	SC
771	180K	T81	RR	Empty	16	Distillate	N/A	6/30/92	SC
771	180K	T82	RR	Empty	16	Distillate	N/A	6/30/92	SC
771	180K	T83	RR	7	16	HNO3/Pu	N/A	6/30/92	SC
771	180K	T83	RR	7	16	HNO3/Pu	N/A	6/30/92	SC
771	180K	T84	RR	14	16	HNO3/Pu	N/A	6/30/92	SC,TI
771	180K	T85	RR	15	16	HNO3/Pu	N/A	6/30/92	SC
~~771~~	~~181A~~	~~D1406~~	~~P~~	~~3~~	~~14~~	~~Strip-Solution~~	~~N/A~~	~~6/30/92~~	~~SC~~
~~771~~	~~181A~~	~~D1407~~	~~P~~	~~7~~	~~14~~	~~Strip-Solution~~	~~N/A~~	~~6/30/92~~	~~SC~~
~~771~~	~~181A~~	~~D1411~~	~~P~~	~~1~~	~~14~~	~~Ammoniumn-Sulfate~~	~~N/A~~	~~6/30/92~~	~~SC~~
~~771~~	~~181A~~	~~D1414~~	~~A~~	~~1~~	~~22~~	~~Ferrous-Sulfate~~	~~N/A~~	~~6/30/92~~	~~SC~~
~~771~~	~~181A~~	~~D1415~~	~~A~~	~~1~~	~~22~~	~~Ammoniumn-Sulfate~~	~~N/A~~	~~6/30/92~~	~~SC~~
776	134	SR3	RR	111	254	SRV Waste	N/A	6/30/92	SC
776	134	SR4	RR	Empty	164	SRV Waste	N/A	6/30/92	SC,TI
776	134	SR5	RR	Empty	164	SRV Waste	N/A	6/30/92	SC
776	134	T344	P	9	9	ASRF Steam Waste	N/A	6/30/92	SC
776	134	T345	P	4	9	ASRF Steam Waste	N/A	6/30/92	SC
776	134	T360	A	7	127	ASRF Steam Waste	N/A	6/30/92	SC
776	134	T370	A	Empty	127	ASRF Steam Waste	N/A	6/30/92	SC
776	146	N/A	PAN	Empty	7	SRV Waste	N/A	6/30/92	SC,IN,LD
776	146	N/A	A	Empty	11	SRV Waste	N/A	6/30/92	SC,IN,LD

6.0 TANK MANAGEMENT PLAN

This section identifies the type and frequency of inspections to be conducted, addresses the non-compliances that exist for the Mixed Residue Tank Systems, provides a schedule for when the non-compliances will be corrected, and provides the proposed methods of managing these Mixed Residue Tank Systems. Due to the unique situations that exist in several buildings regarding non-compliances, portions of this section have been grouped by buildings to identify the non-compliances in more detail and identify unique management practices involving these tank systems.

6.1 INSPECTION TYPES AND SCHEDULE

The following identifies the types and schedule of inspections to be implemented on April 6, 1992 for all Mixed Residue Tank Systems.

6.1.1 Inspection Types

6.1.1.1 Daily Observation and Biweekly Inspection

A daily visual observation of each room that is accessible and contains a Mixed Residue Tank System that is operationally empty and not in-service, will be conducted to verify that no releases have occurred. This observation will require a thorough evaluation of the floors in each room to detect any accumulated liquid. Refer to Section 4.2 of this plan for actions that would be taken if liquids from a release are discovered to be present. The daily observations for all rooms observed will be documented in the facility's operating record, along with any corrective actions taken and the impacts of any release.

In addition, a bi-weekly inspection (not to exceed 14 days between inspections) will be conducted for these tank systems. This inspection will consist of inspecting the Mixed Residue Tank System to detect corrosion, releases of liquid, and to assess monitoring and leak detection equipment. This inspection will also verify the condition of the secondary containment and the presence of any accumulated liquids. Refer to Section 4.2 of this plan for actions that would be taken if liquids from a release are discovered to be present. This inspection will be documented in the operating record of the facility.

6.1.1.2 Daily Inspection

A daily inspection will be conducted for all accessible mixed residue tank systems that are in-service or contain solution levels above operationally empty. This inspection will consist of inspecting the tank system to detect corrosion, releases of liquids, and to assess monitoring and leak detection equipment. This inspection will also verify the condition of the secondary containment and the presence of any accumulated liquids. Refer to Section 4.2 of this plan for actions that would be taken if liquids from a release are discovered to be present. This inspection will be documented in the operating record of the facility.

6.1.1.3 Alternate Inspection Methods

Rooms which contain Mixed Residue Tank Systems which are inaccessible due to extreme radioactive contamination, and/or require the use of supplied breathing air for access, will be addressed in the building specific discussion beginning in Section 6.5.

6.1.2 Inspection Schedule

As the criteria for determining inspection type and frequency change for individual tanks (i.e., tank storage volumes change, out-of-service tanks are upgraded and are placed into service) the inspection type and frequency will change according to the new category the tanks fall into.

Category A

Mixed residue tank systems in Category A that are accessible will require a daily inspection (Section 6.1.1.2) of the tank system.

Category B

All of the mixed residue tank systems in Category B will require alternate tank inspection methods (6.1.1.3).

Category C

Mixed residue tank systems in Category C which are accessible will require daily observation of the room and biweekly inspections of the tank systems (6.1.1.1). Tank systems or portions of tank systems which are inaccessible will require alternate inspection methods (6.1.1.3).

Category D

Accessible mixed residue tank systems in Category D which contain solution levels above operationally empty or are in-service will require daily inspections of tank systems (6.1.1.2). Accessible tanks in Category D that are operationally empty or out-of-service will require biweekly inspections and daily observation of the rooms the tanks are located in (6.1.1.1). Alternate inspection methods are required for tank systems which are inaccessible (6.1.1.3).

6.3 OVERFILL PREVENTION CONTROLS

All but one tank system (D293A, Building 371) has either an electronic level sensing device (level indicators or high-level alarms), a level gauge, sight glass, automatic shutoff, or overflows to a standby tank or glovebox. Therefore, all of the tank systems are considered in compliance with the requirements for overfill prevention, except for criticality collection Tank D293A in Building 371. This tank does not have a calibrated electronic sensing device or visual level gauge, and does not overfill into a standby tank or glovebox. Section 6.5 of this plan addresses the management plan for this tank system.

Category D tank systems are in compliance with overfill protection requirements. However, as an added level of protection, electronic or visual level-sensing devices for these tanks may be upgraded in the future. The overfill prevention controls on tank systems which are destined for closure will not be upgraded. In the future, if liquid transfers are required between any Mixed Residue Tank Systems, controls will be provided by visual observation of both the shipping and receiving tanks, where accessible, during the entire duration of the transfer. Electronic level sensing devices will be monitored for tank systems which are inaccessible, if appropriate, during transfers.

6.4 SECONDARY CONTAINMENT

6.4.1 Secondary Containment for Tanks

All of the tanks identified in the tank system tables (Section 5) show secondary containment as a non-compliance with the exception of the tanks in Module C-Pit, Building 707, and those tanks located in gloveboxes. The flooring in all of the rooms that contain mixed residue tanks are coated with epoxy paint; however, recoating of the secondary containment is necessary to seal any chips or small cracks which are present. Secondary containment will be upgraded for all tanks, with the exception of those tanks which are inaccessible due to excessive radioactive contamination in Building 371. As a means to meet the overfill protection requirements and to address any possible releases to inadequate secondary containment, where accessible the tanks will be observed during all transfers. A more detailed discussion of these requirements is identified in the building specific discussion beginning in Section 6.5.

6.4.2 Secondary Containment for Ancillary Equipment

The compliance status for ancillary equipment has been evaluated in Buildings 707, 776, 777 and partially for Building 771, but not for Building 371. With the exception of the four in-service criticality tank systems in Building 371, the ancillary equipment in Buildings 371 and 771 which have not been evaluated to date are out-of-service. The reason the ancillary equipment has not been evaluated in Building 371, and partially in Building 771, is due to the inability to visually inspect this equipment. For example, some ancillary equipment is located above ceiling tiles or is located in inaccessible rooms. The secondary containment for the ancillary equipment associated with all tanks identified in Category D will be upgraded to meet the requirements of Section 264.193 of the CHWR by August 13, 1993. For all ancillary equipment associated with tanks not identified in Category D, refer to the building specific discussion beginning in Section 6.5.

6.5 BUILDING 371

6.5.1 Secondary Containment and Leak Detection

6.5.1.1 Tanks Storing Liquid and Destined for Closure

There are six tank systems in Building 371 (D2A, D49B, D49C, D49D, D55A, and D55B) containing liquids at levels above operationally empty, which are destined for closure, and which currently do not have adequate secondary containment. In addition, none of these tank systems are accessible for daily inspections; therefore, alternate inspection methods are required.

Tank D2A is located in the sub-basement level of Building 371 in Room 1117. Room 1117 is a highly radioactively contaminated room requiring the use of supplied breathing air for access. The secondary containment system (Room 1117) for this tank system is inadequate because it is not completely coated with epoxy paint. This tank system presently contains approximately ~~1746 gallons of caustic solution and is scheduled to be operationally emptied on May 27, 1993.~~ *459 gallons of solution that was collected from the spill in Room 1117. The initial inventory in this tank was transferred to Tank D160B and then to Building 374 Waste Treatment.* After emptying, the tank system will be taken out-of-service unless needed for acceptance of blowdown from the building's ventilation scrubber system (discussed below). Tank D2B, also located in this room, is currently operationally empty. Both tanks will be physically emptied on September 16, 1993 by draining the remaining solution in the tanks. Due to the amount of work and time required, and the additional exposure to personnel required in attempting to provide adequate secondary containment for the D2A tank, a high priority will be given to emptying this tank system instead of upgrading the secondary containment system.

It is possible that the utilities system in Building 371 will require use of the D2A tank system to accept blowdown from the ventilation scrubber system. If this is required, the liquid will be removed immediately after sampling and transferred to Building 374 for final treatment.

A mirror *was* ~~will be~~ installed in Room 1117 by June 1, 1992 which ~~will~~ provides the capability for a daily visual inspection of the lower portions of the tanks and the floor area directly underneath the tanks. *As an alternate to viewing the tanks and floor with the mirror, daily visual inspections may be conducted by viewing the tanks and floor through the ceiling.* ~~In the interim, until~~ *Prior to and after installation of* the mirror ~~is installed~~, daily inspections of the electronic level-sensing devices will be conducted to determine if the liquid level has dropped. These alternate inspection methods are proposed to meet the leak detection and tank integrity inspection requirements. Refer to Section 4.2 of this plan for actions that would be taken if liquids from a release are discovered to be present. These inspections will be documented in the facility's operating record, including causes of the release, potential impacts, and corrective actions taken.

Tanks D49B, D49C, and D49D are located in Room 3563. Tanks D55A and D55B are located in Room 3559. These rooms are highly radioactively contaminated requiring the use of supplied breathing air for access. The floors in these rooms are not sealed, and are not intended to provide secondary containment for the tanks. Instead the floor in these rooms contains a drain line which drains into criticality Tank D292A which subsequently overflows into criticality Tank D293A. The current combined capacity of criticality tanks D292A and D293A is approximately 1619 gallons. The 1619 gallon capacity will contain the volume of the largest tank (1011 gallons) among Tanks D49B, D49C, D49D, D55A, and D55B. Since criticality Tanks D292A and D293A serve as secondary containment for Tanks D49B, D49C, D49D, D55A, and D55B, a high priority will be given to upgrade the secondary containment system for Tanks D292A and D293A. Additionally, Tanks D49B, D49C, D49D, D55A, and D55B will not receive additional waste.

To meet both inspection and leak detection requirements, daily inspections of the electronic level sensing devices will be conducted to determine if the liquid levels have changed in tanks D49B, D49C, D49D, D55A, D55B , D292A and D293A. If it is discovered that the level has changed, the cause will be determined immediately. In addition, a daily inspection of the portions of Rooms 3559 and 3563 that are visible through the windows will be conducted. Refer to Section 4.2 of this plan for actions that would be taken if liquids from a release are discovered to be present. These inspections will be documented in the facility's operating record, including causes of the release, potential impacts, and corrective actions taken.

6.5.1.2 Tanks to be included in the Operating Permit

Several rooms in Building 371 need to be upgraded to meet the secondary containment requirements of Part 264.193, Subpart J, of the CHWR. These upgrades include the installation of berms to provide the required capacity, and/or the resealing of the secondary containment. The following is the schedule for upgrading the secondary containment for tanks which will be included in the operating section of the application for permit modification to the state RCRA permit for Rocky Flats (Category D).

Room(s)	Completion Date
1103	This room contains the new caustic system tanks which have never been used. Secondary containment will be provided prior to placing these tank systems in operation.
1115*/1127/1111*	June 4, 1993
2207*/2223	June 11, 1993
2317	April 30, 1993

Note: * denotes rooms which are part of the secondary containment system for tank systems located in Rooms 1127 and 2223.

Daily inspections for these in-service tanks will meet the inspection and leak detection requirements.

The secondary containment for ancillary equipment associated with tanks in Category D is being evaluated to determine if upgrades are required. All secondary containment upgrades for Category D tank ancillary equipment will be completed by August 13, 1993.

6.5.1.3 Operationally Empty Tanks Destined for Closure

Rooms 1107, 1109, 3517, 3549, 3553, 3559, 3563, 3571, and 3573 do not provide adequate secondary containment for operationally empty tanks which are destined for closure. The secondary containment in rooms 1107, 1109, 3517, 3571, and 3573 will be upgraded according to the following schedule. Rooms 3549, 3553, 3559, and 3563, which are inaccessible, will not be upgraded. Rooms 1107 and 1109, which are also inaccessible, are small canyon-type rooms which can be decontaminated easily and upgraded to meet the secondary containment requirements.

Room	Completion Date
1107	March 23, 1993
1109	March 26, 1993
3517	April 16, 1993
3571	April 23, 1993
3573	May 7, 1993

The combination of daily observations and biweekly inspections will meet the inspection and leak detection requirements for those tank systems which are accessible (including those tank systems located in Rooms 1107 and 1109 when they become accessible).

For inaccessible tanks, no inspections are planned since these tanks are operationally empty and drain into criticality tanks.

The secondary containment for the ancillary equipment associated with these tanks will not be upgraded. No transfers are anticipated to or from these operationally empty tanks; therefore, there is no plan to use the associated ancillary equipment.

6.5.2 Unfit-for-Use Tanks

Mixed residue tank D2A has an accumulation of salts on a flange which suggests that the ancillary equipment for this tank has leaked in the past. It is not believed that this flange is currently leaking; however, visual verification has not been possible due to high levels of radioactive contamination in this area. Process knowledge and the electronic level sensing devices on this tank indicate that the tank is currently not leaking. The tank contents may be transferred prior to repairing this flange; however, if any liquids are released from this flange during the transfer the liquids will be removed in as timely a manner as is possible.

A release from ancillary equipment associated with the D2 tanks (glovebox 62) was discovered on May 8, 1992 as identified in RCRA Contingency Plan Implementation Report #92-012. The leak was stopped by closing a manual valve inside the glovebox. Tank D2A will be operationally emptied by August 30, 1992.

~~Mixed residue tanks D160A and D160B are currently unfit for use. These tanks are operationally empty and destined for closure. The drain elbow on Tank D160A has a pinhole but is not currently leaking, and the recirculation valve on Tank D160B is inoperable. These tanks will be needed to empty Tank D2A and ultimately transfer the solution to Building 374.~~

Mixed residue tank D160A is currently unfit-for-use. This tank is empty and destined for closure. The drain elbow on Tank D160A has a pinhole but is not currently leaking. This tank will remain out-of-service until the necessary repairs are completed. The completion date for repairing this tank is February 18, 1993.

A release from Tank D160A was discovered on April 24, 1992 as identified in RCRA Contingency Implementation Report #92-008. A physical draining of Tank D160A has been completed with future plans to drain the tank a second time to remove any residual liquid which could have been held-up on the raschig rings and physically blank the fill and drain lines associated with this tank or repair the pinhole in the drain elbow. The recirculation valve on Tank D160B has been deemed to be operational .

A release from ancillary equipment associated with Tanks D400A and D400C was discovered on April 24, 1992 as outlined in RCRA Contingency Plan Implementation Report #92-010. A closed valve on the reagent feed line is believed to be the source of the liquid accumulating at the drain line manifold where the release occurred. A work package is being developed to drain the caustic line. This work will be completed by November 6, 1992.

A release from ancillary equipment (feed line for the D157 and D2 tanks) was discovered on May 24, 1992 as outlined in RCRA Contingency Plan Implementation Report #92-014. The leaking ancillary equipment has been temporarily repaired and all the liquid was removed from Rooms 1105, 1115, and 1117 by June 1, 1992. Efforts are underway to decontaminate the entire area.

6.6 BUILDING 707

6.6.1 Secondary Containment and Leak Detection

Building 707 tanks have adequate secondary containment. The hazardous waste transfer piping (ancillary equipment) which is associated with Tank V-31 in Building 707 Module C-Pit does not meet the requirements of Section 264.193 of CHWR for leak detection.

This piping is currently located in the ceiling above the tiles which prevent visual inspections. To meet this leak detection requirement, the hazardous waste transfer piping will be replaced with piping installed below the ceiling tiles in Building 707. The completion date for this upgrade is December 31, 1992. The transfer line from Module C-pit will not be used until a new transfer line has been installed.

6.6.2 Unfit-for-Use Tanks

Building 707 does not currently have any tanks which have been identified as unfit-for-use.

6.7 BUILDING 771

6.7.1 Secondary Containment and Leak Detection

Several rooms in Building 771 need to be upgraded to meet the secondary containment requirements of Section 264.193 of the CHWR. These upgrades include the installation of berms to provide the necessary capacity, and/or the resealing of the secondary containment. The following is a listing of rooms in Building 771 which contain tanks which currently do not have adequate secondary containment, or are part of the secondary containment system for tanks which will be included in the operating section of the application for permit modification to the state RCRA permit for Rocky Flats (Category D), and will require upgrading to achieve compliance.

Room	Completion Date
114	June 24, 1993
146	June 24, 1993
149	June 24, 1993
153	June 24, 1993
174	December 14, 1992
180A	January 18, 1993
180K	January 18, 1993
181A	August 13, 1993

By completing the upgrade of the rooms listed above, adequate secondary containment will be provided for all of the mixed residue tanks in Building 771 regardless of their category. The visual observation and biweekly inspection method will meet the leak detection requirements for the tanks which are destined for closure, and daily inspections will meet the leak detection requirements for tanks storing liquids or in-service.

The secondary containment for ancillary equipment associated with tanks in Category D is being evaluated to determine if upgrades are required. All secondary containment upgrades for Category D tank ancillary equipment will be completed by August 13, 1993.

The secondary containment for the ancillary equipment associated with tanks destined for closure will not be upgraded. No transfers are anticipated to or from these operationally empty tanks; therefore, there is no plan to use the associated ancillary equipment.

6.7.2 Unfit-for-Use Tanks

Several tank systems in Building 771 have taped flanges, valves, or piping that is wrapped with plastic. This ancillary equipment is wrapped as part of a normal practice to ensure radioactive contamination is not released in the event of a leak. Currently, none of these tanks are leaking. However, before any transfers occur, the ancillary equipment will be evaluated to ensure the integrity of this equipment is adequate.

For those tank systems identified in Category D, any necessary upgrades will be completed by August 13, 1993.

The following tanks in Building 771 have been identified with this condition: D1001, D1002, D1003, D1004, D1005, D1006, D609, D610, D500, D501, D502, D503, D504, D505, D506, D975, D177, D453, D454, D472, D469, D470, D1804, and T84.

A release from Tank D1804 was discovered on April 23, 1992 as outlined in RCRA Contingency Plan Implementation Report #92-007. This leak has been stopped by isolating the leak point and the tank has been physically drained. No further actions are planned as this tank is destined for closure.

A release from Tank D1414 was discovered on May 8, 1992 as outlined in RCRA Contingency Plan Implementation Report #92-011. The leak has been cleaned up and stopped by capping the sample line. This RCRA Contingency Report was implemented as a precaution because it had not been fully documented that this tank is a reagent tank, and therefore, is not regulated.

6.8 BUILDING 776

6.8.1 Secondary Containment and Leak Detection

The Mixed Residue Tank Systems in Room 134 West of Building 776 will be included in the operating section of the application for permit modification to the state RCRA permit for Rocky Flats (Category D). Room 134 West needs to be upgraded to meet the secondary containment requirements of Section 264.193 of the CHWR. These upgrades will include the repairing and resealing of the secondary containment for the tanks and associated ancillary equipment. The completion date for upgrading the secondary containment is August 13, 1993.

The combination of daily observation and biweekly inspections, or daily inspections will meet the leak detection requirements for the tanks in this room.

6.8.2 Unfit-for-Use Tanks

Mixed Residue Tank SR-4 in Room 134 West of Building 776 will be included in the operating section of the application for permit modification to the state RCRA permit for Rocky Flats (Category D). Tank SR-4 has recently had a minor repair completed to repair a pinhole located on a weld at the bottom of the tank. This tank is out-of-service and will remain out-of-service until the repair has been evaluated.

6.9 BUILDING 777

6.9.1 Secondary Containment and Leak Detection

Rooms 131, 134 East, and 430 in Building 777 are part of the secondary containment system for the hazardous waste transfer piping from Tank V-31 in Module C-Pit of Building 707. Tank V-31 will be included in the operating section of the application for permit modification to the state RCRA permit for Rocky Flats; therefore, the secondary containment for the piping must be upgraded. These upgrades include the repairing and resealing of the floors in each room.

The completion date for the repairs to the secondary containment is December 31, 1992. This transfer piping will remain out-of-service until adequate secondary containment is provided. Secondary containment will be provided for all of the tanks located in Building 777 by the upgrade of the secondary containment for the transfer piping.

Leak detection will be provided for these tanks by the combination of daily observations and biweekly inspections, or daily inspections where applicable. Leak detection will be provided for the transfer piping by daily inspections when it is placed in-service.

6.9.2 Unfit-for-Use Tanks

Mixed residue tank T-12 in Room 134 East of Building 777 has a hole in the side of the tank. This tank contains approximately 11 gallons and is currently out-of-service, and destined for closure. The hole in the side of the tank has a patch clamped over it, and is not currently leaking. This tank will remain out-of-service and there is no plan to repair the hole in the tank.

Tanks T-1 and T-2 in Room 430, and Tank D1103 in Room 131 are destined for closure and each have a pinhole in a welded seam of the tanks. These tanks are empty and currently out-of-service, and will remain out-of-service. There is no plan to repair the holes in these tanks.

6.10 BUILDING 778

6.10.1 Secondary Containment

The mixed residue transfer piping which transfers liquids from Tank V-31 in Building 707 to Building 774 will be included in the operating section of the application for permit modification to the state RCRA permit for Rocky Flats (Category D). This piping extends

through the security hallway in Building 778. This hallway does not meet the secondary containment requirements of Section 264.193 of the CHWR. The secondary containment will be upgraded by installing a new double-walled pipe from Building 707 to Building 777 by December 31, 1992. The leak detection requirements will be met by providing a low point drainage collection system for the secondary containment which will be monitored in Buildings 777 and 707.

6.10.2 Unfit-for-Use Tanks

No mixed residue tanks are located in Building 778.