

CORRES CONTROL
INCOMING LTR NO

00098 RF03

DUE DATE
ACTION



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Department of Energy

2003 FEB 10 A 9 56

ROCKY FLATS FIELD OFFICE
10808 HIGHWAY 93, UNIT A
GOLDEN, COLORADO 80403-8200

CORRESPONDENCE
CONTROL

03-DOE-00067

FEB 06 2003

Mr Steven H Gunderson
Rocky Flats Cleanup Agreement Project Coordinator
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

Dear Mr Gunderson

In accordance with the Rocky Flats Cleanup Agreement (RFCA) Standard Operating Protocol (RSOP) for Component Removal, Size Reduction and Decontamination Activities, this letter and its enclosures is notification for RSOP implementation. This notification is for RCRA Unit Closure of RCRA Units 39 and 40 in Buildings 444 and 447. Activities will be designed to achieve the closure performance standard, protect human health and the environment, and minimize waste. Specific work instructions, with engineering, health and safety, and waste management information, will be developed prior to start of closure activities. These instructions will be developed in accordance with applicable Rocky Flats Environmental Technology Site policies and procedures.

Partial closure of Unit 40 will be completed pursuant to the previously approved Closure Description Documents:

- Closure Description Document for Partial Closure of Interim Status Unit 40, Building 444/447 - Process Waste Sinks (CDPHE approval Sept 25, 02)
- Closure Description Document for Partial Closure of Interim Status Unit 40, Building 444/447 - Acid Waste System and Cyanide Waste System (CDPHE approval - January 13, 2003)

The result will be complete closure of the units

Kaiser-Hill Company, LLC or a subcontractor will conduct the work. The exact methods and process selection will be communicated with the Colorado Department of Public Health and Environment (CDPHE) through an active consultation process including meetings. If alternate methods to those delineated in the RSOP are planned, an additional notification will be made. The building shell, including the floor, will not be breached during component removal activities unless specifically approved by CDPHE. Questions can be directed to Steve Tower at (303) 966-2133.

Sincerely,

Richard J DiSalvo
Acting Assistant Manager
for Environment and Stewardship

Enclosure



DIST	LTR	ENC
BERARDINI, J. H.	X	X
BOGNAR, E. S.	X	X
CROCKETT, G. A.		
DECK, C. A.	X	X
DEGENHART, K. R.		
DIETER, T. J.		
DIETERLE, S. E.		
FERRERA, D. W.	X	X
FERRI, M. S.		
GERMAN, A. L.		
GIACOMINI, J. J.		
ISOM, J. H.		
LINDSAY, D. C.	X	X
LONG, J. W.		
LYLE, J. L.		
MARTINEZ, L. A.	X	X
NAGEL, R. E.	X	X
NORTH, K.	X	X
PARKER, A. M.	X	X
POWERS, K. P.		
RODGERS, A. D.		
SHELTON, D. C.	X	X
SPEARS, M. S.		
TRICE, K. D.		
TUOR, N. B.	X	X
WILLIAMS, J. L.		
NESTA, S.	X	X
FREIBOTH, C.	X	X
BROOKS, I.	X	X
LEITNER, R.	X	X
ARNOLD, P.	X	X
LAVORATO, K.	X	X

COR CONTROL	X	X
ADMIN RECORD	X	X
PATS/130		

Reviewed for Addressee
Corres Control RFP

2/10/03 by
Date By

Ref Ltr #

DOE ORDER #

5480-19

ADMIN RECORD

B444-A-000037

COMMUNICATIONS
RECEIVED
CLASSICAL MAIL OFFICE

Y 19

Mr Steven H Gunderson
03-DOE-00067

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FEB 06 2003

cc w/o Encl

E Schmitt, OOM, RFFO

S Tower, AMP, RFFO

S Nesta, K-H RISS Env

C Freiboth, K-H RISS D&D

T Rehder, USEPA

cc w/Encl

Administrative Record

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**RSOP For Component Removal, Size Reduction,
and decontamination Activities Checklist**

Attachment 1
FEG-003-03
Page 2 of 8

Project scope. RCRA Closure of the remaining portions of Unit 40 in Buildings 444/447		
Facility description: Building 444/447, Manufacturing and General Support Building		
Description of planned activity(ies). The decontamination, size reduction, and component removal required to close the remainder of RCRA Unit 39 and 40		
Facility/rooms/sets/areas involved: Building 444/447, Rooms as listed		
Is RCRA unit closure(s) part of the planned activity?		<input checked="" type="checkbox"/> Yes
If RCRA units are included, attach unit specific information sheets and drawings		<input type="checkbox"/> No
Attach checklists from Appendix A of the RSOP. <i>Complete checklists by room/set/area/facility, as appropriate</i> Note: No checklists are provided, the checklists submitted with the Building 444/447 notification for the component removal/size reduction/decontamination activities cover the associated RCRA closure	<input checked="" type="checkbox"/> Component Removal/Size Reduction	
	<input checked="" type="checkbox"/> Decontamination	
RLCR Status	<input checked="" type="checkbox"/>	RLCR complete and concurrence received¹ 11/21/02
	<input type="checkbox"/>	RLCR initiated but incomplete, concurrence anticipated.
	<input type="checkbox"/>	RLC has not been initiated¹ and is scheduled for initiation on[*]
If RLCR is not complete or initiated, what data will be used to plan the work activities?	Not applicable	
Activity requires modification to the ARARs listed in the RSOP	<input type="checkbox"/>	Yes, attach to letter
	<input checked="" type="checkbox"/>	No
Attach Administrative Record file requirements for the activity. Not applicable		
Point of contact for each facility/activity: Cameron Freiboth, 303-966-2823		
Duration of work activities: 18 Months	Anticipated work start	First quarter 2003
Attach schedule for each facility or activity for information purposes Schedule submitted with the Building 444/447 notification included the RCRA unit closure activities.		
Does the activity involve removing contaminated portions of the building shell? Include a description of the activity, contamination levels and controls	<input type="checkbox"/>	Yes, LRA consultation and concurrence required
	<input checked="" type="checkbox"/>	No

¹ Evaluate using DPP, Sections 114 and 115 and the consultative process to implement activities

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**RSOP For Component Removal, Size Reduction,
and decontamination Activities Checklist**

Attachment 1
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Are there deviations/exceptions to the RSOP for the proposed activity(ies)?		<input type="checkbox"/>	Yes
		<input checked="" type="checkbox"/>	No
Provide an explanation of deviation/exception to the RSOP. Not applicable			
C Check the appropriate resulting action box below			
Additional RFCA decision document required (PAM – IM/IRA)			
Major modification to RSOP		Field change to RSOP	
Minor modification to RSOP		LRA consultation	
Activity(ies) will result in the following waste types			Process waste
			<input checked="" type="checkbox"/> Remediation waste
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
TRU	X	LLW	X
		LLMW	X
		Haz.	
		Sanitary	
		Other	
LRA Notification Review Time		14 days, no RCRA unit closure involved	
		<input checked="" type="checkbox"/>	30 days, RCRA unit closure involved

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**RSOP For Component Removal, Size Reduction,
and decontamination Activities Checklist**

Attachment 1
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Administrative Record Requirements for this Activity

- Final Rocky Flats Cleanup Agreement (RFCA)
- RFETS Decommissioning Program Plan (DPP)
- RFCA Standard Operating Protocol for Component Removal, Size Reduction, and Decontamination Activities
- Reconnaissance Level Characterization Report Area 3- Buildings 444/447
- Notification Letter and subsequent CDPHE correspondence, if appropriate

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RFCA Standard Operating Protocol (RSOP) for Facility Component Removal, Size Reduction, & Decontamination Activities

Technical Scope Summary for RCRA Unit 39 and 40

1.0 INTRODUCTION

Building 444 was used for the manufacture of uranium and beryllium parts. Operations included beryllium, uranium, and electric discharge machining, welding, heat treating, coating, plating, etching, and nondestructive testing. Building 447 was a multipurpose manufacturing and waste processing facility, which supported Building 444. Operations in Building 447 included electron beam welding, electrochemical operations, heat treating, vacuum arc melting, nondestructive testing, chip roasting, and chip cementing.

This technical scope summary provides RCRA unit specific closure information for portions of RCRA Unit 39 and 40, the process waste system in Building 444/447. The process waste system consists of three distinct units: the acid waste system, the cyanide waste system, and the process wastewater system. All three systems followed a common discharge pathway, from Building 444 through valve vaults 13, 14, 15, 16, 19, and 20 via the low-level line into Building 374 for treatment. The process waste system contains 11 Interim Status Units, consisting of tanks, floor sumps, floor drains, and sinks.

Interim status units to be closed under this RSOP notification are Units 39 01, 39 02, 40 04, 40 05, 40 35, 40 36, and 40 37. All of the interim status units are RCRA Stable. Five of the units that receive water from the building perimeter drains by way of the floor sumps, continue to be utilized for ground water management.

The closure of these RCRA regulated units shall be in accordance with the Rocky Flats Environmental Technology Site's (RFETS) "RFCA Standard Operating Protocol (RSOP) for Facility Component Removal, Size Reduction, and Decontamination Activities, Revision 2, November 4, 2002".

2.0 SYSTEM DESCRIPTION AND WASTE CHARACTERIZATION

All the interim status units in Building 444/447 are currently in a RCRA Stable condition (i.e., they are operationally empty and have been isolated from the process waste system). Closure of these units will be accomplished by a combination of Clean Closure and Unit Removal without On-Site Treatment. Due to the nature and extent of contamination in some areas, it is anticipated that certain ancillary equipment will not be able to meet the decontamination standard and will require removal. Final closure of this equipment will be completed during D&D under RFCA.

As indicated above, the process waste system consists of three distinct units: the acid waste system, the cyanide waste system, and the process waste system. The acid waste system, cyanide waste system and a portion of the process waste system of Unit 40 will be completed pursuant to previously approved Closure Description Documents:

- Closure Description Document for Partial Closure of Interim status Portions of Unit 40 Building 444/447 – Acid Waste System and Cyanide Waste System (CDPHE approved 25 Sept 02)
- Closure Description Document for Partial Closure of Interim status Portions of Unit 40 Building 444/447 – Process Waste Sinks (CDPHE approved 13 January 03)

The closure information for the remaining system tanks is included with this notification and are identified as follows T-2 (Unit 40 04), T-3 (Unit 40 05), T-4 (Unit 40 35), ST-5 (40 36), Roll/Fabric Filter (39 01), Roll/Fabric Filter (39 02), and T-6 (Unit 40 37) The subject tanks and ancillary equipment located in Building 444 are part of the process waste system Unit 40 This system was used in the collection of aqueous process waste generated in Buildings 444/447 The EPA hazardous waste codes assigned to these interim status tank units are D001, D002, D004 – D011, D018, D019, D028, D029, D035, D038, D040, D043, F001 – F003, F005, and F007 – F009 Attachment B, "Associated RCRA Waste Codes, Contaminants of Concern, & Action Levels", identified the RCRA Waste Codes, the contaminants of concern, and action levels associated with the remaining process waste system tanks Rinseate from the tanks will be compared to action values in Attachment B to determine clean closure.

2.1 Process Waste System

Process wastes such as spent cleaning solutions, caustics, acids, water based coolants and cleaners, oils, and other materials generated in Building 444 from the laboratory sinks and process operations were pumped in overhead piping or gravity drained into the Building 444 process waste collection system The wastes were collected in Unit 40 35 (holding tank T-4), then pumped through Unit 39 01 (rotary cloth filtration system), to Unit 40 36 (sump tank ST-5) Wastes collected in Unit 40 36 were pumped to Units 40 04 and 40 05 (process waste tanks T-2 and T-3) for transfer to Building 374 for treatment

Process wastes generated in Building 447 were pumped in overhead piping or gravity drained into the process waste collection system The wastes were filtered through Unit 39 02 (rotary cloth filtration system) and collected in Unit 40 37 (holding tank T-6) The wastes were then pumped to Unit 40 35 (holding tank T-4) in Building 444 Piping and Instrumentation diagrams for the process waste tanks are included in Attachment A These RCRA units will be closed in compliance with the closure performance standards described in the following sections

2.1.1 Roll filters As discussed above, RCRA Units 39 01 and 39 02 were roll filter units These units were an integral part of the process waste collection system in building 444/447 Each consisted of a roll filter table, an associated surge tank, a 55-gallon drum that contained the used filter fabric, and secondary containment for this equipment The roll filters were designed to assure that all particulate materials were removed from the liquid waste streams generated in the building The particulate materials, and the used filter cloth, were routinely packaged as low level mixed waste The EPA hazardous waste codes assigned to these units are D001, D002, D004, D005, D007, D008, D018, D019, D028, D029, D035, D038, D040, D043, F001 – F003, F007, and F009

Maintenance activities were conducted as a portion of the RCRA Stable effort in Building 444/447 in 1997 These activities indicated that the roll filters were in need of considerable repair Consequently, both roll filters were removed No attempt was made to decontaminate the roll filters and they were packaged as a mixed waste Following the verification that no hazardous materials existed in the wastewater that was being managed in the building, a single canister-type filter was placed in the system at the former location of Unit 39 01 The canister-type filter is being managed as RCRA Stable

To complete the closure of the roll filter units (Units 39 01 and 39 02), the open-top tanks will be inspected to determine if they contain any sludge If sludge is discovered, it will be removed and handled as low level mixed waste The tank and secondary containment will then be flushed with a solution of trisodium phosphate or other suitable detergent The final rinse water will be sampled for total metals, VOCs, cyanide, and gross alpha beta Fingerprint analysis (including pH and reactivity) will also be run Comparisons of these data will be made to the RFCA, Attachment 5, Ground Water Action Levels, Tier II (see Attachment B), to assess clean closure by decontamination If the sample cannot be verified "clean close", the closure process may be repeated If the tanks cannot be rinsed or verified as "clean close", the tanks will be removed and managed as low level mixed waste

In accordance with the Facility Component Removal, Size Reduction, and Decontamination Activities RSOP, the roll filter tanks of this unit will be closed under section 5.1.1, "Clean Closure Options #2, by chemical decontamination. Regulated solid waste generated in association with these removal actions will be managed in accordance with Section 7.3, "Waste Management" of the RSOP. The D001 and D002 codes will not be applicable to the solid waste upon generation because the waste will no longer exhibit the characteristic of ignitability or corrosivity.

To complete closure of the single canister-type filter, the canister will be opened and the filter socks removed and managed as low level mixed waste. The canister will be inspected to determine if it contains any sludge. If sludge is discovered, it will be removed and handled as low level mixed waste. The canister and secondary containment will then be flushed with a solution of trisodium phosphate or other suitable detergent. The final rinse water will be sampled for total metals, VOCs, cyanide, and gross alpha beta. Fingerprint analysis (including pH and reactivity) will also be run. Comparisons of these data will be made to the RFCA, Attachment 5, Ground Water Action Levels, Tier II (see Attachment B), to assess clean closure by decontamination. If the canister cannot be verified "clean close", the closure process may be repeated. If the canister cannot be rinsed or verified as "clean close", the canister will be removed and managed as low level mixed waste.

In accordance with the Facility Component Removal, Size Reduction, and Decontamination Activities RSOP, the filter canister will be closed under section 5.1.1, "Clean Closure Options #2, by chemical decontamination. Regulated solid waste generated in association with these removal actions will be managed in accordance with Section 7.3, "Waste Management" of the RSOP. The D001 and D002 codes will not be applicable to the solid waste upon generation because the waste will no longer exhibit the characteristic of ignitability or corrosivity.

2.1.2 Ground Water Management Tanks. RCRA Units 40.05 and 40.37 (process waste tanks T-2 and T-6) have been used primarily for the management of non-hazardous ground water since about 1993. Since 1996 samples of water have been collected from the tanks indicating that the water is non-hazardous. These data were submitted to the CDPIIE and proved sufficient to declare the tanks RCRA Stable. Inspection frequency was modified from daily to quarterly (Ref. Joe Schieffelin memo to Joseph Legare, "RCRA Stable" Approval for Various Interim Status Units; EPA ID# CO7890010526, Dated August 23, 1999).

The ground water management and building cleanup are primarily responsible for the non-hazardous water that currently resides in the interim status units due to the large volume of non-hazardous water that has passed through these units. The combination of existing water quality data and newly-generated information will be used to show clean closure of these interim status units.

The final step in the closure process will be to rinse the tanks, sumps, and ancillary equipment discussed in the preceding paragraphs. The final rinse will not exceed 5% of the volume of the tank system. The water will be collected in Units 40.04, 40.05, and 40.37. A composite sample will be collected and analyzed for total metals, VOCs, cyanide, and gross alpha beta. Fingerprint analysis (including pH and reactivity) will also be run. Comparisons of these data will be made to the RFCA, Attachment 5, Ground Water Action Levels, Tier II (see Attachment B), to assess clean closure by decontamination. If the composite sample cannot be verified "clean close", the closure process may be repeated by rinsing individual components, analyzing the rinsate, and evaluating the results. Any portion of the system that cannot be rinsed or verified as "clean close", (i.e., lines and pumps) will be removed and managed as low level mixed waste.

In accordance with the Facility Component Removal, Size Reduction, and Decontamination Activities RSOP, the ground water management tanks will be closed under Section 5.1.1, "Clean Closure", Clean

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Closure Option #2. Because these tanks have managed several thousand gallons of non-hazardous water, a chemical decontamination step will not be completed, as this water has served that purpose. Regulated solid waste generated in association with these removal actions will be managed in accordance with Section 7.3, "Waste Management", of the RSOP. The D001 and D002 codes will not be applicable to the solid waste upon generation because the waste will no longer exhibit the characteristic of ignitability or corrosivity.

3.0 SYSTEM BOUNDARIES

The boundary for the RCRA tank units and ancillary equipment removal will be Valve Vault #19. A number of intermediate isolation points will be identified in the detailed work packages that will assure the selection of a point that can be capped or blind flanged in a manner that prevents tripping or obstruction hazards. These interim isolation points will be required in order to practically complete the waste removal (liquids and sludge) and to allow for a phased system closure. A portion of the piping from Building 444/447 to Valve Vault #19 may be removed under Closure Description Document for Partial Closure of RCRA Unit 374.3 – The 400 area Process Waste Transfer System at RFETS.

4.0 DISPOSITION OF WASTES GENERATED DURING CLOSURE

It is anticipated that the Site's waste management and treatment systems will be available to receive the cleanup waste. The cleanup waste will include wastewaters to be treated in the AWTS or CWTF, equipment that is stripped out during the closure process, and other solid waste, such as used Personal Protective Equipment (PPE).

The Unit components radioactively contaminated will be managed in accordance with the requirements of the RFETS Radiological Control Manual and Health and Safety Practices Manual, and will be packaged for disposal in accordance with applicable waste acceptance criteria. The waste that cannot be or does not meet clean closure, will be characterized using process knowledge and in accordance with applicable regulations. The only EPA codes that will not apply to the hazardous waste debris are D001 and D002, because the debris will not exhibit the characteristic of ignitability or corrosivity.

Wipes, other combustibles used to immobilize free liquids and PPE will be managed as low-level mixed waste and will be characterized in accordance with applicable regulations. All waste containers will be stored in an appropriate onsite storage area prior to offsite disposal.

5.0 RECORDS

The following closure records will be maintained on Site during closure activities and at a federal repository for a minimum of 30 years following the report of closure:

- Record of sampling activities including type, number and date of samples,
- Analytical results,
- Work instructions used to conduct closure activities and documentation verifying closure activities were conducted in accordance with the RCRA Permit Part B Closure Plan and this RSOP Notification,
- Records of the volume of hazardous waste generated during closure, as documented in the Closure Summary Report.

Closure Summary Report will be part of the Facility Closeout Report.

ATTACHMENT A

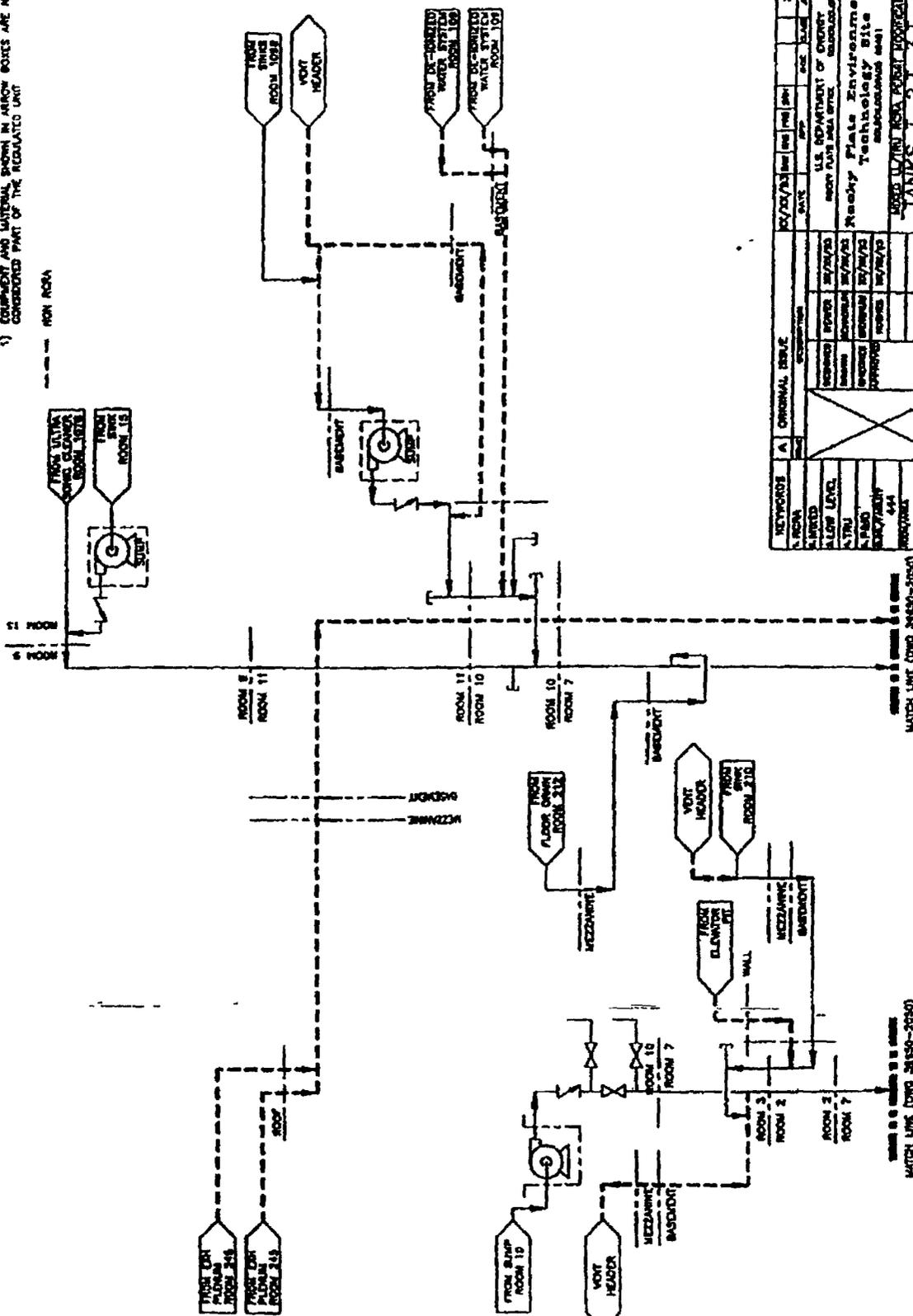
**Piping and Instrumentation Diagrams
 Building 444/447**

Drawing Numbers	RCRA Unit	System	Page(s)
B39650-2050 through B39650-2052	40.04 40.05 40.35 40.36 39.01	Process Waste Tank T-2 Process Waste Tank T-3 Holding Tank T-4 Sump Tank ST-5 Roll/Fabric Filter (B444)	A-2 – A-4
B39650-2330	40.04 40.05	Secondary Containment for: Process Waste Tank T-2 Process Waste Tank T-3	A-5
B39650-2331	40.35	Secondary Containment for. Tank T-4	A-6
B39650-2332	40.36 39.01	Secondary containment for: Tank ST-5 Roll/Fabric filter (B444)	A-7
B39650-2055	40.37 39.02	Tank T-6 Roll/Fabric filter (B4470)	A-8
B39650-2336	40.37 39.02	Secondary Containment for: Tank T-6 Roll/Fabric Filter (B447)	A-9

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NOTES

1) EQUIPMENT AND MATERIAL ROOMS IN ARROW BOXES ARE NOT CONSIDERED PART OF THE REGULATED UNIT

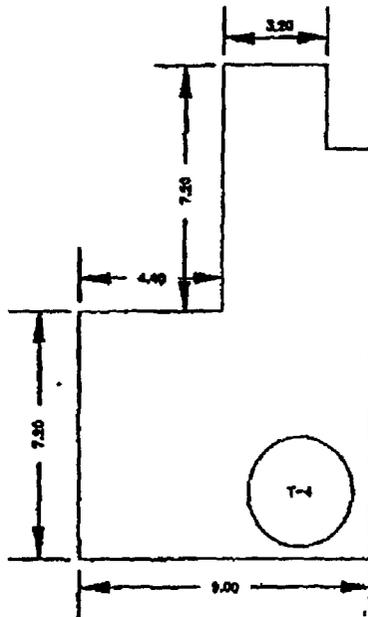


REVISIONS	A	ORIGINAL ISSUE	DATE	BY	CHK	APP	CHK	APP	CHK	APP
1	REVISED	ROOM 10A	12/15/73	...	...	...	...	...	...	...
2	REVISED	ROOM 10B	12/15/73	...	...	...	...	...	...	...
3	REVISED	ROOM 10C	12/15/73	...	...	...	...	...	...	...
4	REVISED	ROOM 10D	12/15/73	...	...	...	...	...	...	...
5	REVISED	ROOM 10E	12/15/73	...	...	...	...	...	...	...
6	REVISED	ROOM 10F	12/15/73	...	...	...	...	...	...	...
7	REVISED	ROOM 10G	12/15/73	...	...	...	...	...	...	...
8	REVISED	ROOM 10H	12/15/73	...	...	...	...	...	...	...
9	REVISED	ROOM 10I	12/15/73	...	...	...	...	...	...	...
10	REVISED	ROOM 10J	12/15/73	...	...	...	...	...	...	...
11	REVISED	ROOM 10K	12/15/73	...	...	...	...	...	...	...
12	REVISED	ROOM 10L	12/15/73	...	...	...	...	...	...	...
13	REVISED	ROOM 10M	12/15/73	...	...	...	...	...	...	...
14	REVISED	ROOM 10N	12/15/73	...	...	...	...	...	...	...
15	REVISED	ROOM 10O	12/15/73	...	...	...	...	...	...	...
16	REVISED	ROOM 10P	12/15/73	...	...	...	...	...	...	...
17	REVISED	ROOM 10Q	12/15/73	...	...	...	...	...	...	...
18	REVISED	ROOM 10R	12/15/73	...	...	...	...	...	...	...
19	REVISED	ROOM 10S	12/15/73	...	...	...	...	...	...	...
20	REVISED	ROOM 10T	12/15/73	...	...	...	...	...	...	...
21	REVISED	ROOM 10U	12/15/73	...	...	...	...	...	...	...
22	REVISED	ROOM 10V	12/15/73	...	...	...	...	...	...	...
23	REVISED	ROOM 10W	12/15/73	...	...	...	...	...	...	...
24	REVISED	ROOM 10X	12/15/73	...	...	...	...	...	...	...
25	REVISED	ROOM 10Y	12/15/73
26	REVISED	ROOM 10Z	12/15/73

U.S. DEPARTMENT OF ENERGY
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 Environmental Health
 Safety & Health
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 SUMP TANK FABRIC FILTER
 B 39650-2051 A

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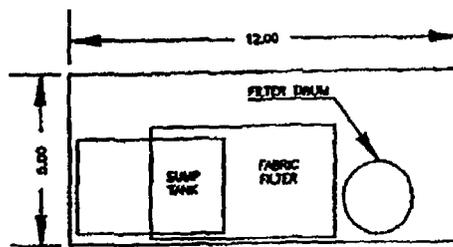
SECONDARY CONTAINMENT CALCULATIONS

- 1) VOLUME OF LARGEST TANK (Vt): 500 gal
- 2) FLOOR AREA (A1) 94 sf
- 3) AREA OF OBSTRUCTIONS (Ao) 0 sf
- 4) NET AREA (An) (An) = (A1) - (Ao) 94 sf
- 5) MINIMUM BERM (Hb): 8.8 in
 $Hb = (Vt) / ((An) \times 7.48 \text{ gal/cf}) \times 12 \text{ in/ft}$

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1	U.S. DEPARTMENT OF ENERGY ROCKY PLATE AREA OFFICE								
2	Rocky Plate Plant								
3	SECONDARY CONTAINMENT PERMIT MODIFICATION								
4	ROOM 1								
5	SCALE: NONE								
6	MASTER								
7	NO. 1								
8									
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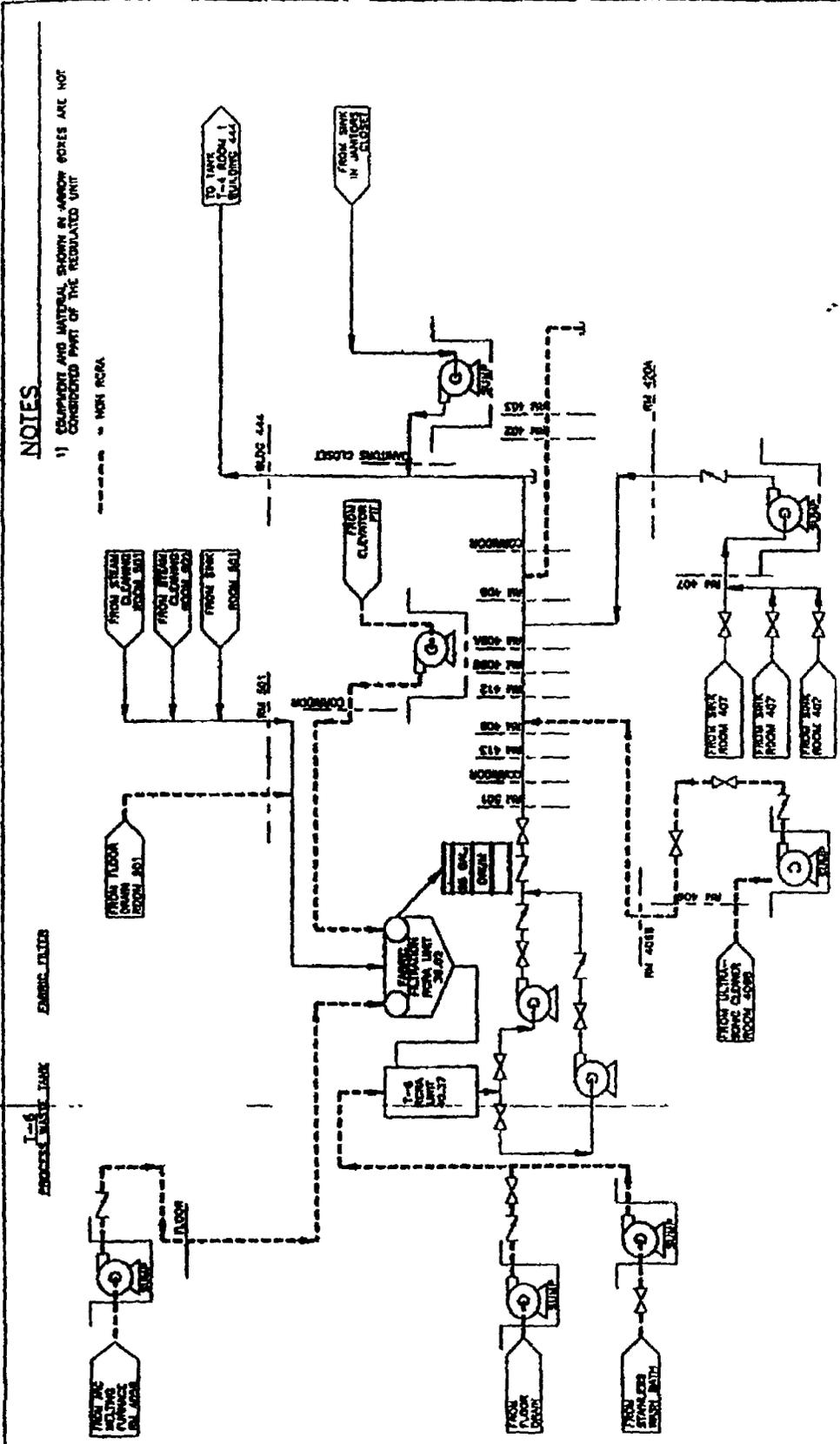


SECONDARY CONTAINMENT CALCULATIONS

- 1) VOLUME OF LARGEST TANK (V_L) 100 gal
- 2) FLOOR AREA (A_F) 60 sf
- 3) AREA OF OBSTRUCTIONS (A_O) 0 sf
- 4) NET AREA (A_N) (A_F) - (A_O) 60 sf
- 5) MINIMUM BERM (H_B) 2.7 in
 $(H_B) = ((V_L) / (A_N) \times 7.48 \text{ gal./cf}) \times 12 \text{ in./ft}$

REVISIONS	A	ORIGINAL ISSUE	DATE	BY	CHKD BY	APP	DATE	BY	CHKD BY	APP
1		DESIGNED	12/10/78							
2		CHECKED	12/10/78							
3		DRAWN	12/10/78							
4		REVISIONS	12/10/78							
5		APPROVED	12/10/78							
6		SCALE								
7		DATE								
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16



NOTES

1) EQUIPMENT AND MATERIAL SHOWN IN ARROW BOXES ARE NOT CONSIDERED PART OF THE REGULATED UNIT

--- NON RCRA

REVISION	DATE	BY	DESCRIPTION
1	12/15/83
2	12/15/83
3	12/15/83
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100	12/15/83

ATTACHMENT B
Associated RCRA Waste Codes, Contaminants of Concern & Action Levels
(RFCA, Attachment 5, Ground Water Action Levels)

RCRA Waste Code	Associated Contaminants of Concern	Tier II Action Level (mg/L)
D001	Ignitable	No longer characteristic (RFCA, Ground Water Action Levels, Attachment 5)
D002	Corrosive	pH between 6 and 9
D004	Arsenic	5 00E-02
D005	Barium	2 00E+00
D006	Cadmium	5 00E-03
D007	Chromium	1 00E-01
D008	Lead	1 50E-02
D009	Mercury	2 00E-03
D010	Selenium	5 00E-02
D011	Silver	1 83E-01
D018	Benzene	5 00E-03
D019	Carbon Tetrachloride	5 00E-03
D028	1,2 Dichloroethane	5 00E-03
D029	1,1 Dichloroethylene	7 00E-03
D035	Methyl Ethyl Ketone	2 19E+01
D038	Pyridine	See Note
D040	Trichloroethylene	5 00E-03
D043	Vinyl Chloride	2 00E-03
F001	Listed spent halogenated solvents used in degreasing	Action level varies with solvent*
F002	Listed spent halogenated solvents	Action level varies with solvent*
F003	Listed spent non-halogenated solvents	Action level varies with solvent*
F005	Listed spent non-halogenated solvents	Action level varies with solvent*
F007	Spent cyanide plating bath solution from electroplating operations	Action level varies with constituent*
F008	Plating bath residues from the bottom of plating baths from electroplating operations where cyanides are used in the process	Action level varies with constituent*
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process	Action level varies with constituent*

* Analytical results will be evaluated for various constituents of each solvent associated with the RCRA waste codes

Note Tier II Action Level will be less than maximum concentration of contaminants for the toxicity characteristics

1/9/19