

CORRES CONTROL

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GRK-035-98

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PATTERSON J W		
SUTTON S R		
WHEELER M		
HUMSTON, J.		
MADDOX, C M.		
VESS, M.T.		



Rocky Flats Environmental Technology Site
 P O Box 464
 Golden, Colorado 80402-0464
 Phone: (303) 966-2729
 Fax (303) 966-4641

March 3, 1998

Randy M Leitner, Program Manager
 Compliance and Performance Assurance
 Building T130C
 Kaiser-Hill Company, L L C

Subject NOTIFICATION TO BEGIN CLOSURE OF THE SOUTHWEST PORTION OF RCRA UNIT 40 UNDER THE CLOSURE PLAN FOR INTERIM STATUS UNITS - GRK-035-98

RMRS RECORDS X X

RF CORRES
 CONTROL
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CLASSIFICATION
 UCNI
 UNCLASSIFIED
 CONFIDENTIAL
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AUTHORIZED CLASSIFIER SIGNATURE

Date

IN REPLY TO RF CC NO

ACTION ITEM STATUS
 PARTIAL/OPEN
 CLOSED

LTR APPROVALS
 ORIG & TYPIST INITIALS

Pursuant to Compliance Order on Consent 97-08-21-01, Rocky Mountain Remediation Services, L L C (RMRS) intends to close the southwest portion of RCRA Unit 40 by October 31, 1998. Closure will be conducted in accordance with the *Closure Plan for Interim Status Units* (Closure Plan), which was released for public comment in early February. Closure work has already been completed and certified for the interim status units located in Building 460, and is ongoing in Building 123, where closure is being conducted as part of an accelerated action under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), as approved in the Building 123 Proposed Action Memorandum (PAM). In addition, pre-closure activities are ongoing in Buildings 428, 444/447, and the valve vaults, where process waste lines are being washed and flushed as part of routine maintenance activities. Closure work within Buildings 428, 444/447, and the valve vaults is scheduled to begin in early May.

Section B 3 of the Closure Plan requires that the CDPHE be notified at least 45 days prior to the commencement of closure activities. In addition, the Closure Plan requires that the closure notification be accompanied by a Closure Description Document, which provides detailed information on the individual interim status units, or portions of units, that are to be closed. In order for CDPHE to be properly notified, please send this notification and the enclosed *Closure Description Document for the Southwest Portion of RCRA Unit 40* (RF/RMRS-98-214 UN, February 27, 1998) to DOE-RFFO as soon as the Closure Plan is approved by CDPHE. Draft letters to DOE-RFFO and CDPHE are attached.

GRK-035-98
March 3, 1998
Page 2 of 2

If you have any questions, please contact me at extension 2729, or Catherine Madore at extension 3692



Gary R. Konwinski
Environmental Manager

CMM

Enclosure (1) and Attachments (2)
as stated

cc

K North - Kaiser-Hill
J K Wrapp - Kaiser-Hill

DRAFT DRAFT DRAFT

Bob April, Unit Lead
Regulatory Liaison Unit
Rocky Flats Field Office
U S. Department of Energy
ATTN Dave Grosek

98-RF-XXX

**NOTIFICATION TO BEGIN CLOSURE OF THE SOUTHWEST PORTION OF RCRA UNIT
40 UNDER THE CLOSURE PLAN FOR INTERIM STATUS UNITS - RML-XXX-99**

Kaiser-Hill Company, L L C , is submitting the enclosed draft 45-day notification to begin closure of the southwest portion of RCRA Unit 40 on _____, 1998. This unit will be closed in accordance with the *Closure Plan for Interim Status Units* (approved March ____, 1998), and the enclosed *Closure Description Document for the Southwest Portion of RCRA Unit 40* (RF/RMRS-98-214 UN, February 16, 1998)

The Closure Plan requires that CDPHE be notified at least 45 days prior to the start of closure activities. In order for CDPHE to be properly notified of the start date, please send the enclosed notification letter and Closure Description Document to CDPHE by _____, 1998.

Thank you for your assistance. If you have any questions, please contact me at extension 3537, or Catherine Madore at extension 3692.

Randy M Leitner, Program Manager
Compliance & Performance Assurance

Enclosure.
As Stated

Orig and 1 cc: Bob April

Distribution w/ Attachment

D Grosek - DOE-RFFO
G R Konwinski - RMRS
C M Madore - RMRS
K North - Kaiser-Hill

DRAFT DRAFT DRAFT

Mr Joe Scheffelin, Unit Leader
Hazardous Waste Monitoring and Enforcement Unit
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, CO 80246-1530

98-DOE-XXX

Dear Mr Scheffelin

The U S Department of Energy, Rocky Flats Field Office (DOE-RFFO) issues this notification of the intent to begin closure of the southwest portion of RCRA Unit 40, in accordance with the *Closure Plan for Interim Status Units*, and the enclosed *Closure Description Document for the Southwest Portion of RCRA Unit 40* (RF/RMRS-98-214 UN, February 27, 1998)

Closure work has already been completed and certified for the interim status units located in Building 460, and is ongoing in Building 123, where closure is being conducted as part of an accelerated action under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), as approved in the Building 123 Proposed Action Memorandum (PAM). In addition, pre-closure activities are ongoing in Buildings 428, 444/447, and the valve vaults, where process waste lines are being washed and flushed as part of routine maintenance activities. Closure work within Buildings 428, 444/447, and the valve vaults is scheduled to begin on _____, 1998

If you have any questions, please contact Dave Grosek of my staff at 966-3305

Bob April, Unit Lead
Regulatory Liaison Unit
DOE-RFFO

Enclosure
As Stated

cc (w/o enclosure)

C Gilbreath - CDPHE
G R Konwinski - RMRS
R M Leitner - Kaiser-Hill
C M Madore - RMRS
K North - Kaiser-Hill



RF/RMRS-98-214.UN

**Closure Description Document
for the
Southwest Portion of RCRA Unit 40**

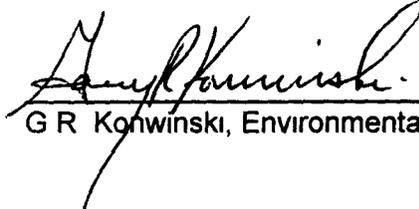
**U.S. Department of Energy
Rocky Flats Environmental Technology Site
EPA I.D. No. CO7890010526**

February 27, 1998

**Closure Description Document
for the
Southwest Portion of RCRA Unit 40**

Revision 0

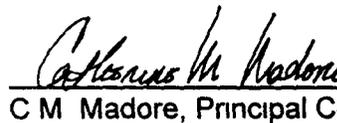
Reviewed and Approved by:



G R Konwinski, Environmental Manager

03-02-98
Date

Prepared by:



C M Madore, Principal Compliance Specialist

02-27-98
Date

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1 0 INTRODUCTION

Pursuant to Compliance Order on Consent 97-08-21-01 (Consent Order), the southwest portion of RCRA Unit 40 must be closed by October 31, 1998. Closure activities will be undertaken in accordance with the "Closure Plan for Interim Status Units at the Rocky Flats Environmental Technology Site" (the Closure Plan). The Closure Plan describes the methods by which the Site's interim status units will be closed, and defines the performance standards against which closure activities will be measured. As prescribed by the Closure Plan, specific plans for the closure of individual interim status units will be contained in Closure Description Documents.

1 1 Applicability and Scope

RCRA Unit 40 is part of the sitewide system of holding tanks, sumps, valve vaults, transfer stations, and pipelines constructed to collect and transport aqueous process wastes and incidental waters from Buildings 122, 123, 428, 444/447, 460, 776, 778, 779, 881, 883, 865/866, 881, 883, and 887 to treatment facilities located in Building 374. **Figure 1-1** presents a diagram of the overall process waste transfer and collection system.

The closure of RCRA Unit 40 is being conducted using a phased approach, in accordance with the schedule contained in the Consent Order. This RCRA Closure Description Document applies only to the southwest portion of RCRA Unit 40, which includes the above-ground and below-ground components of the process waste transfer and collection system that are located in and around Buildings 122, 123, 428, 444/447 and 460. **Figure 1-2** shows the boundaries of this portion of RCRA Unit 40. **Table 1-1** lists the individual RCRA unit numbers for each building.

1 2 Unit Closure Notification, Schedule, and Certification

Closure of the southwest portion of RCRA Unit 40 will be conducted as a partial closure of the Unit. As required by 6 CCR 1007-3, Part 265 112(d), prior notification is being submitted to the Colorado Department of Public Health and Environment (CDPHE) with this Closure Description Document.

Pre-closure decontamination activities, including the washing and rinsing of process waste lines and secondary containment, may be performed outside the scope of the Closure Plan or this Closure Description Document, as routine maintenance operations. However, final rinsate will not be sampled until these documents have been approved by CDPHE.

In the event that closure activities are expected to exceed 180 days, CDPHE will be notified within 30 days of such a determination and at least 30 days prior to the expiration of the 180-day closure period (Part 265 113[b] and [c]).

Figure 1-2. Southwest Portion of RCRA Unit 40

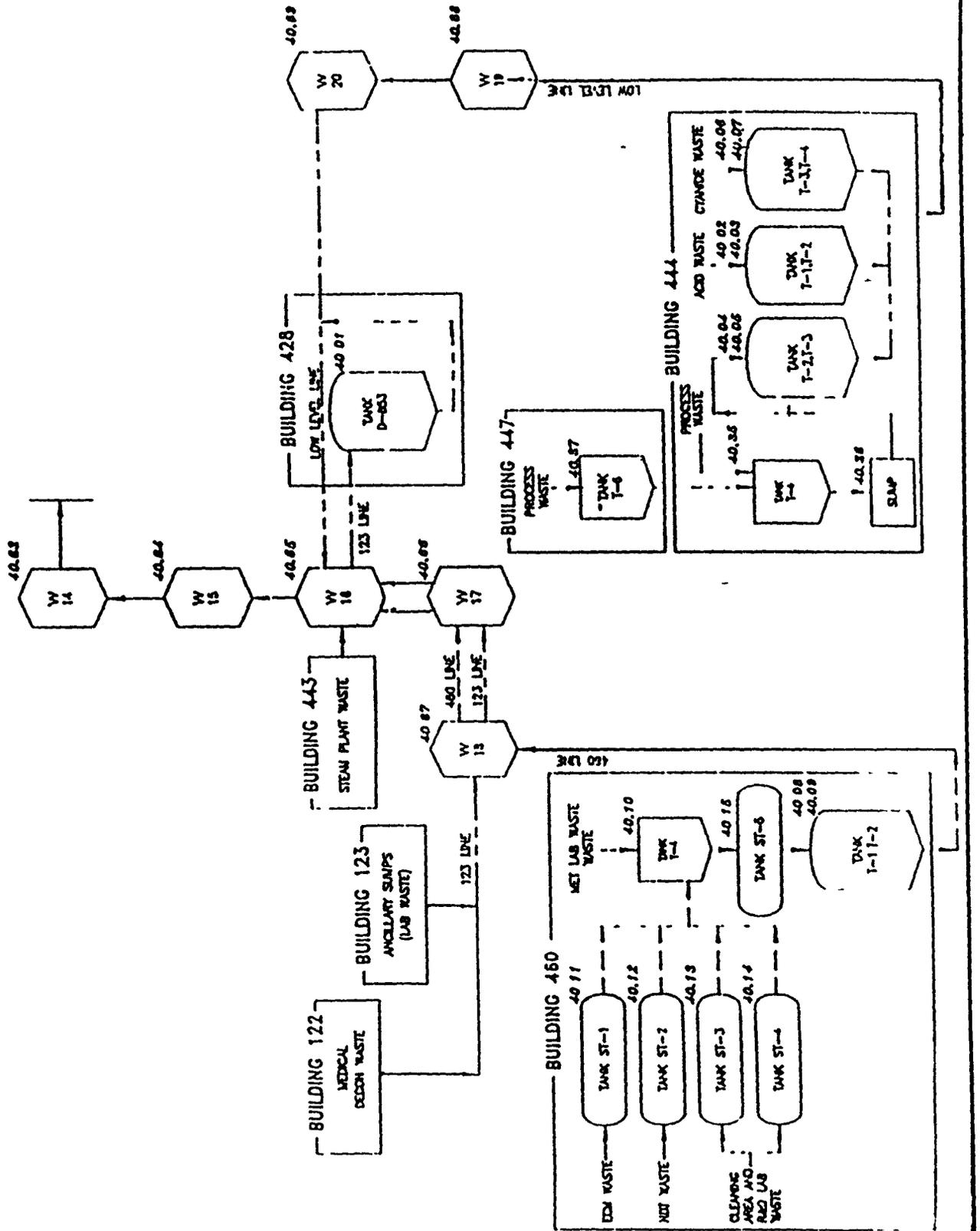


Table 1-1. Individual Unit Numbers for the Southwest Portion of RCRA Unit 40

Building	RCRA Unit Number	Description
122	N/A	B122 handles non-hazardous medical decon waste only
123	N/A	Process waste lines, sumps and pump stations associated with B123 are a part of RCRA Unit 40 but were never assigned specific RCRA Unit numbers
428	40 01	Holding Tank D-853
444	39 01	Roll Filter
444	40 02	Acid Waste Tank T-1
444	40 03	Acid Waste Tank T-2
444	40 04	Process Waste Tank T-2
444	40 05	Process Waste Tank T-3
444	40 06	Cyanide Waste Tank T-3
444	40 07	Cyanide Waste Tank T-4
444	40 35	Filter System Holding Tank T-4
444	40 36	Sump Tank T-5
447	39 02	Roll Filter
447	40 37	Holding Tank T-6
460	40 08	Holding Tank T-1
460	40 09	Holding Tank T-2
460	40 10	Holding Tank T-3
460	40 11	Sump Tank ST-1
460	40 12	Sump Tank ST-2
460	40 13	Sump Tank ST-3
460	40 14	Sump Tank ST-4
460	40 15	Sump Tank ST-5
VV	40 63	Valve Vault 14
VV	40 64	Valve Vault 15
VV	40 65	Valve Vault 16
VV	40 66	Valve Vault 17
VV	40 67	Valve Vault 18
VV	40 68	Valve Vault 19
VV	40 69	Valve Vault 20

1 3 Regulatory Drivers

Closure of the southwest portion of RCRA Unit 40 is governed by the Consent Order and the Colorado Hazardous Waste Regulations, 6 CCR 1007-3, Part 265 (Subpart G - Closure and Post Closure [Parts 265 110 through 265 120], Subpart I - Containers [Part 265 178], and Subpart J - Tanks [Part 265 190]), 6 CCR 1007-3, Part 265) Compliance with Part 266, Subpart A - Financial Requirements, does not apply to government-

owned facilities, therefore, the Site is not required to demonstrate financial responsibility

1.4 Preparation of Work Instructions

In accordance with 1-74000-IWCP, Integrated Work Control Program (IWCP), approved RMRS work instructions, or other appropriate documents (e.g., technical operations orders) will be used to perform the closure work for the southwest portion of RCRA Unit 40. A safety evaluation will accompany these documents to ensure that health and safety issues are addressed.

1.5 Health and Safety

Closure activities will be conducted in compliance with the RFETS Health and Safety Practices Manual, which identifies measures to ensure worker health and safety. In addition, the principles of As Low as Reasonably Achievable (ALARA) will be followed with respect to personnel radiation dosage and exposure to hazardous materials.

1.6 Facility Contact

The contact for closure activities at the Rocky Flats Environmental Technology Site is Manager, Rocky Flats Field Office, U.S. Department of Energy, P.O. Box 928, Golden, CO 80402-0928, (303) 966-2025.

2.0 CLOSURE PERFORMANCE STANDARDS

Sections C and D of the Closure Plan define the closure performance standards for the southwest portion of RCRA Unit 40. Under these standards, the Site's interim status units will be closed in accordance with 6 CCR 1007-3, Part 265.111, which specifies that hazardous waste facilities are to be closed in a manner that will minimize the need for further maintenance at the facility and protect human health and the environment by controlling, minimizing, or eliminating potential releases of hazardous waste. Closure options include:

- Clean closure by decontamination,
- Unit equipment removal in conjunction with "Debris Rule" treatment, and
- Unit equipment removal without onsite treatment.

The closure of unit equipment or structures that cannot be successfully decontaminated or removed will be deferred to Decontamination & Decommissioning (D&D) under the Rocky Flats Cleanup Agreement (RFCA).

2.1 Clean Closure by Decontamination

Under this standard, tanks, valve vaults, piping, sumps, and other ancillary equipment will be flushed and washed with a solution of trisodium phosphate and water, or other

suitable detergent that will remove visible waste residuals and contaminants of concern, and then rinsed with clean water. The final rinsate will be tested to verify that

- The concentration of priority pollutants and heavy metals is below the Tier II action levels defined in Attachment 5 of the Final Rocky Flats Cleanup Agreement (July 19, 1996), and
- The pH of the rinsate is between 6 and 9

For external surfaces, the final rinsate will not exceed a volume of two gallons per 100 ft² of surface area rinsed, and for internal surfaces, the final rinsate will not exceed a volume of 5% of the capacity of the tank system. If test results indicate that the standard has been met, the unit equipment will be considered "clean closed" and closure certification documentation will be prepared and signed by an independent, Colorado-registered, Professional Engineer. In the event that test results show residual contamination, appropriate actions will be taken to remove the remaining contaminants. Unit equipment or structures that cannot be successfully decontaminated to meet this standard will be removed, or deferred to D&D under RFCA.

2.2 Unit Removal in Conjunction with "Debris Rule" Treatment

In the event that unit equipment or structures cannot meet the performance standard for clean closure by decontamination, "Debris Rule" treatment may be considered. The "Debris Rule" applies to RCRA unit equipment or structures that have no intended use or reuse, and are slated for removal and discard. To meet the "Debris Rule" standard, decontamination will be conducted using the "water washing and spraying" chemical extraction technology, or other appropriate technology identified in Part 268.45 of 6 CCR 1007-3 (Table 1, Alternative Treatment Standards for Hazardous Debris).

If, after "Debris Rule" treatment, the equipment or structure meets the standard for a "clean debris surface," and it does not exhibit a hazardous waste characteristic, it will no longer be considered a hazardous waste, and need not be managed in a hazardous waste facility. For the purposes of Part 268.45, "clean debris surface" means that the surface, as viewed without magnification, "is free of all visible contaminated soil and hazardous waste except that residual staining from soil and waste consisting of light shadows, slight streaks, or minor discolorations, and soil and waste in cracks, crevices, and pits may be present provided that such staining and waste and soil in cracks, crevices, and pits shall be limited to no more than 5% of each square inch of surface area."

Water containing trisodium phosphate or other suitable detergent will be used as the decontamination solution for "Debris Rule" treatment. To ensure adequate cleaning, a volume of solution equal to approximately three times the piping/tank volumes will be used to flush the tanks and ancillary equipment contained in the southwest portion of RCRA Unit 40.

Unit equipment or structures that cannot be successfully decontaminated to meet this standard will be deferred to D&D under RFCA.

2.3 Unit Removal Without Onsite Treatment

Unit equipment or structures that cannot be decontaminated to meet the "clean closure by decontamination" or "Debris Rule" standard will be removed, size-reduced, and handled as hazardous waste in accordance with the Site's RCRA Part B permit, or they will be deferred to D&D under RFCA

2.4 Soil Investigation and Criteria for Determining Post-Closure Care

The potential for soil contamination will be evaluated as closure activities are conducted in the southwest portion of RCRA Unit 40. Where existing documentation (e.g., Building logs, occurrence reports) indicates that spills or releases to the environment have not occurred during the operational history of the equipment or structure, a visual evaluation will be conducted to verify the absence of soil discoloration, spill residues, or other indicators of a release to the environment. In this case, soil sampling will not be required. However, in the event that existing documentation and/or a visual inspection reveals that soil in the vicinity of the equipment or structure has been contaminated with RCRA-regulated constituents, the type and extent of the contamination will be defined and a determination will be made to remediate the contamination as part of the ongoing closure activity, or defer remediation to D&D under RFCA.

3.0 SAMPLING AND ANALYSIS

Sample collection and analysis is an integral part of the closure of the southwest portion of RCRA Unit 40. Sampling and analytical methods, and quality assurance standards are addressed in the following paragraphs.

3.1 Sampling Methods

Methods used to collect hazardous waste samples at RFETS comply with those described in 6 CCR 1007-3, Part 261, Appendix I. Specific methods are selected based on the ease with which representative samples can be collected, sampling location, sampling matrix, sample container type and size, and accessibility. Waste matrices and appropriate sampling methods will be consistent with the methods listing in Part IV of the Rocky Flats RCRA Part B Permit.

Rinsate sampling will be the preferred method for equipment and structures within the southwest portion of RCRA Unit 40. Rinsate sampling involves the collection and analysis of sample liquids that have contacted interior surfaces of the tanks, ancillary equipment, and secondary containment.

3.2 Analytical Methods

Analytical work will be performed in an onsite laboratory, or an RFETS-approved laboratory. The analytical test methods for verification of compliance with the "clean closure by decontamination" standard are consistent with the approved methods listed in Part IV of the Rocky Flats RCRA Part B Permit.

3 3 Quality Assurance

The applicable RFETS Field Operating Procedures (5-21-000-OPS-FO), or equivalent procedures, will be used to ensure the integrity of representative samples and analytical data

3 4 Sampling Parameters

The RCRA Part A application for RCRA Unit 40 lists the following EPA Waste Codes D001, D002, D003, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D022, D028, D029, D035, D038, D040, D043, F001, F002, F003, F005, F007, F008, F009

After treatment for "clean closure by decontamination," the final rinsate will be tested for the constituents listed in **Table 3-1**. In addition, fingerprint analyses will be performed to include pH and reactivity

4 0 CLOSURE ACTIVITIES FOR BUILDING 122

Building 122 houses Occupational Medicine, Internal Dosimetry and the Drug Screen Office. The only process drains in the building are located in Room 127, which is used for the treatment and decontamination of RFETS personnel. The room contains three showers, three sinks, and a decontamination table, all of which drain to the process waste system. A decontamination trailer, which is located adjacent to Building 122, is piped directly to one of the showers in the building. Waste from Room 127 and the decontamination trailer consists of non-hazardous low-level radioactive wash water, which is not regulated by RCRA.

Although the process waste drains in building 122 are not used to dispose of hazardous waste and the Building is not considered to be a part of RCRA Unit 40, the process waste line has been washed and flushed as a Best Management Practice (BMP). This activity occurred on Thursday, January 22, 1998. At that time, one gallon of Simple Green® liquid soap was distributed among the seven process drains. This was followed by a 35-minute flush with cold water, resulting in a total volume of approximately 250 gallons of wash water, which drained to the Building 123 process waste line located in Valve Vault 18, through valve vaults 17 and 16 and into tank D-853 (Building 428) prior to transfer to Building 374 for treatment (see **Figure 1-1** for a diagram of the process flow).

As a result of this activity, Building 122 personnel have been instructed that they must continue to ensure that hazardous wastes are not poured into the process waste drains in Room 127. In the event that the decontamination facilities are used to treat a contaminated individual(s), Building 122 management will notify the Manager of RMRS Water Management & Treatment and the Manager of DynCorp's Environmental Programs and Compliance, who will evaluate the nature and extent of the release and, if necessary, notify CDPHE (ref. letter from G R Konwinski [RMRS Environmental Compliance] to F J Furman [DCI, Occupational Medicine] GRK-017-98, dated January 28, 1998).

Table 3-1. Sampling Parameters for the Southwest Portion of RCRA Unit 40

	Target Analyte/Compound	EPA Code
Metals	Arsenic	D004
	Barium	D005
	Cadmium	D006
	Chromium	D007
	Lead	D008
	Mercury	D009
	Selenium	D010
	Silver	D011
	VOCs	1,1,2-Trichloroethane
1,1,1-Trichloroethane		F001/F002
1,1-Dichloroethane		D028
1,2-Dichloroethylene		D029
Acetone		F003
Benzene		D018/F005
Carbon Disulfide		F005
Carbon tetrachloride		D019/F0012
Chlorobenzene		D021/F002
Chloroform		D022
Ethylbenzene		F003
Methyl ethyl ketone		D035/F005
Methylene chloride		F001/F002
Pyridine		D038/F005
Tetrachloroethylene		D039/F001/F002
Trichloroethylene		D039/F001/F002
Xylenes (total)	F003	
Other	Cyanide	F007/F008/F009

5 0 CLOSURE ACTIVITIES FOR BUILDING 123

Up until September of 1997, Building 123 housed the onsite laboratories that performed routine analyses on biological and environmental samples. The Building 123 components of RCRA Unit 40 consist of a series of process waste lines, sumps, and pumping stations, which are currently undergoing RCRA closure in accordance with RF/RMRS-97-052, "Closure Plan for Building 123 Components of RCRA Unit 40" (dated November 12, 1997). Closure of the Building 123 components of RCRA Unit 40 is part of a larger project to decontaminate and decommission Building 123 and the surrounding area. This project is being conducted as an accelerated action under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) approved under the Building 123 Proposed Action Memorandum (PAM). Closure activities include deactivation, dismantlement, and remediation of all system components in Building 123, including the active underground pipeline that runs from the building, through valve vaults 18, 17, and 16, and up to tank D-853 (Building 428).

Sumps, pumping stations, pipelines, and other ancillary equipment have been decontaminated using a solution of sodium carbonate, trisodium phosphate, and water. The final rinsate, which was sampled at tank D-853 on February 5, 1998, is being tested to determine if it meets the performance standard for clean closure by decontamination. If the rinsate meets this standard, then Building 123 components of the process waste transfer and collection system will be considered closed up to tank D-853. If the rinsate contains contaminants above the standard, the pipeline will be removed. Closure Certification documentation will be prepared and signed by an independent, Colorado-registered, Professional Engineer.

6.0 CLOSURE ACTIVITIES FOR BUILDING 428

Building 428 houses tank D-853, which stores waste from the Building 123 process waste line prior to transfer to Building 374 via the Building 444/447 low-level waste line (see **Figure 1-1** for process flow). The sampling that was conducted to verify clean closure of the Building 123 process waste line from the building to valve vault 16 (see Section 5, above), will also verify that the tank D-853 meets the required closure performance standard. The Building 123 Closure Certification will verify successful closure of the Building 123 line from the building, through valve vaults 18, 17, and 16, and up to, but not including, tank D-853. Certification of the successful closure of tank D-853 will be included in the Closure Certification documentation for the southwest portion of RCRA Unit 40.

Additional closure activities for Building 428 will include physical scrubbing and washing of the secondary containment (i.e., walls and floor), sump well, and sump pump with a solution of trisodium phosphate and water, or other suitable detergent, and rinsing with clean water. Used decontamination solution will be pumped to the sump well and transferred to Building 374 via the Building 444/447 low-level waste line. The final rinsate will be sampled to verify clean closure by decontamination.

7.0 CLOSURE ACTIVITIES FOR BUILDING 460

Building 460 produced parts and assemblies from stainless steel, aluminum, vanadium, copper, gold, silver, magnesium, titanium, Teflon and other plastics. Building operations included production machining, electrochemical machining, and grinding, a variety of cleaning processes, and product inspection. Process wastes were pumped in overhead piping or gravity drained in double-contained piping beneath the floor into the process waste system, consisting of a series of tanks, sumps, and other ancillary equipment that transferred the wastes from the building, through valve vaults 18 and 17, to valve vault 16, where the Building 460 transfer line intercepts the Building 444/447 low-level line. From valve vault 16, the waste was pumped through valve vaults 15, 14, and 13, and into Building 374 for treatment (see **Figure 1-1** for process flow).

The Building 460 components of RCRA Unit 40 were closed under the "RCRA Closure Plan for the Building 460 Process Waste System" (October 19, 1995). Closure Certification documentation was prepared and signed by an independent, Colorado-registered, Professional Engineer on September 16, 1996, and submitted to CDPHE on November 12, 1996.

Although closure was successful for all the tanks, sumps, and ancillary equipment inside Building 460, Section 3.2.1 of the Closure Certification states that the section of pipe from Building 460 to valve vault 18 did not meet the performance standard for clean closure by decontamination because benzene was detected in the final rinsate at 1 ppb. Upon further review of the raw data and data analysis sheet for this sample, it was determined that benzene was discovered at a level below the Practical Quantitation Limit (PQL). Analysis results below the PQL are considered non-detectable concentrations. In addition, the 1 ppb benzene detected in the rinsate from valve vault 18 is below the RFCA Tier II standard of 5 ppb, which is the current standard under the Site's new RCRA Part B Permit. As a result, this section of pipeline did not fail for benzene and should be considered clean closed. This conclusion will be validated by an independent, Colorado-registered, Professional Engineer in the Closure Certification for the southwest portion of RCRA Unit 40, which will be prepared when closure activities are complete. A copy of the Volatile Organics Analysis Data Sheet for the sample in question is presented in **Attachment A**.

Although the section of the Building 460 process waste line that runs from the building to valve vault 18 has been sampled and analyzed, and is considered to be clean closed, the stretch of line that runs from valve vault 18, through valve vault 17, into valve vault 16 has not been tested. As a result, a solution of trisodium phosphate and water, or other suitable detergent, will be introduced into the sump in valve vault 18 and pumped into the Building 460 process waste line, where it will reside for several days, before being transferred to Building 374. The line will then be flushed with clean water, and the final rinsate sampled at tank D-802 in Building 374. This will verify closure of the Building 460 line from valve vault 18, through valve vault 17, to valve vault 16, where the Building 460 line joins the Building 444/447 low-level line (see **Figure 1-1**).

8.0 CLOSURE ACTIVITIES FOR BUILDING 444/447

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.

The Building 444/447 component of RCRA Unit 40 consists of three distinct systems: the acid waste system, the cyanide waste system, and the process waste system. All three systems follow a common discharge pathway, from Building 444, through valve vaults 19, 20, 16, 15, 14, and 13 via the low-level line, and into Building 374 for treatment.

All the interim status units in Building 444/447 are currently in a RCRA Stable condition. Closure of these units will be accomplished by a combination of unit decontamination and removal. As part of a routine maintenance activity, Units 39.01 and 39.02 (the roll filters), were removed and packaged as a mixed waste. Unit 39.01 was replaced with a canister type filter. The acid waste and cyanide waste systems will be decontaminated and clean-closed in place. Considerable closure work took place on these units in 1991, when the laboratories that they

serviced were closed. These actions are detailed in the following paragraphs. The remainder of the interim status units, which are needed for ground-water management, will be documented to contain no hazardous constituents. The 1,500,000 gallons of non-hazardous ground water that have been pumped through this system have brought these units to closure through use. Operational records will be presented to document that the system has been rinsed many times. Analytical data representing a rinse of the system will document the clean closure of the tanks, filtration, and pumps that are necessary for ground-water management.

8.1 Acid Waste System

The acid waste system serviced the plating laboratories on the second floor of Building 444. Spent acidic solutions gravity-drained from the laboratory to RCRA Units 40 02 and 40 03 (acid waste tanks T-1 and T-2). In 1991, these two tanks were opened and inspected, and they were found to be free of sediments. The acid drains that originated in the laboratories were washed with a solution of trisodium phosphate and water, then flushed with clean water. These solutions were collected in the tanks and pumped to Building 374 for treatment. Following this process, the tanks were triple-rinsed and the rinse waters were sent to Building 374 for treatment. At that time, the process waste drains that were plumbed to these tanks were grouted shut and blind flanges were installed on the tanks. Piping and instrumentation diagrams for the acid waste system are included in **Attachment B**. RCRA Unit Information Sheets are provided in **Attachment C**.

This decontamination process was sufficient to meet the closure criteria, but no final rinsate was collected. To verify the successful closure of RCRA Units 40 02 and 40 03, distilled water will be sprayed into each tank, and the secondary containment will be washed with a solution of trisodium phosphate and water, or other suitable detergent. Final rinsate samples will be collected and analyzed for total metals, VOCS, cyanide, and gross alpha beta, prior to transfer to Building 374 for treatment. A finger print analysis (including pH and reactivity) will also be run. Comparisons of these data will be made to the Tier II action levels to judge the success or failure of clean closure by decontamination. In the event that any part of the system does not meet this standard, it will be removed or deferred to D&D under RFCA.

8.2 Cyanide Waste System

The cyanide waste system serviced the plating laboratories on the second floor of Building 444. Spent cyanide solutions gravity drained from the laboratory RCRA Units 40 06 and 40 07 (cyanide waste tanks T-3 and T-4). In 1991, the cyanide drains that originated in the laboratories were washed with a solution of trisodium phosphate and water, then flushed with clean water. Following this process the drains were grouted shut and blind flanges were installed on the tanks. Piping and instrumentation diagrams for the cyanide waste system are included in **Attachment B**. RCRA Unit Information Sheets are provided in **Attachment C**.

This process was sufficient to meet the closure criteria, but no final rinsate was collected. To verify the successful closure of former RCRA Units 40 06 and 40 07 distilled water will be sprayed into each tank, and the secondary containment will be

washed with a solution of trisodium phosphate and water or other suitable detergent. Final rinse samples will be collected and analyzed for total metals, VOCs, cyanide, and gross alpha beta, prior to transfer to Building 374 for treatment. A finger print analysis (including pH and reactivity) will also be run. Comparisons of these data will be made to the Tier II action levels to judge the success or failure of clean closure by decontamination. In the event that any part of the system does not meet this standard, it will be removed or deferred to D&D under RFCA.

8.3 Process Waste System

Process wastes generated in Building 444 from 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 (the rotary cloth filtration system), to Unit 40 36 (sump tank ST-5). Wastes collected in Unit 40 36 were pumped 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.

A series of sumps recover ground water from tile drains around the perimeter of Buildings 444/447. These sumps are not a part of RCRA Unit 40 and will not undergo RCRA closure. Data have been submitted to the CDPHE demonstrating that the ground water currently meets drinking water standards. The sumps and ground water they recover will be used as a portion of the cleaning water for the interim status units undergoing closure.

The floor drains, process waste sinks, and sumps are ancillary equipment to RCRA Unit 40. These "drains" were added to the process waste system to control radiological contamination. To verify successful closure, the drains, sinks, and sumps will be flushed with a solution of trisodium phosphate and water, or other suitable detergent, then rinsed with clean water. Final rinse samples will be collected and analyzed for total metals, VOCs, cyanide, and gross alpha beta, prior to transfer to Building 374 for treatment. A finger print analysis (including pH and reactivity) will also be run. Comparisons of these data will be made to the Tier II action levels to judge the success or failure of clean closure by decontamination. In the event that any part of the system does not meet this standard, it will be removed or deferred to D&D under RFCA.

Piping and instrumentation diagrams for the process waste tanks are included in **Attachment B**. RCRA Unit Information Sheets are provided in **Attachment C**.

8.3.1 Roll Filters. As discussed in Section 8.3, above, RCRA Units 39 01 and 39 02 were roll filter units, which 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 that were generated in the building. The particulate materials and the used filter cloth were routinely packaged as mixed waste.

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 waste water 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. This filter unit is not RCRA regulated.

To complete the closure of the roll filter units, 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 mixed waste. The tanks and secondary containment will then be flushed with a solution of trisodium phosphate and water, or other suitable detergent. The final rinse water from this effort will be sampled for total metals, VOCs, cyanide, and gross alpha beta, prior to transfer to Building 374 for treatment. A finger print analysis (including pH and reactivity) will also be run. Comparisons of these data will be made to the Tier II action levels to judge the success or failure of closure by decontamination. These features will remain in place for ground-water management.

8.3.2 Ground-Water Management Tanks. RCRA Units 40 04, 40 05 and 40 37 (process waste tanks T-2, T-3, and T-6) have been used primarily for the management of non-hazardous ground water for the last five years. Over the last two years, several samples of water have been collected from the tanks indicating that the water is non-hazardous. These data were submitted to the CDPHE and were sufficient to declare the tanks RCRA Stable and modify the inspection frequency from daily to quarterly.

Minimal additional closure activities are planned for these tanks, because they will be required for ground-water management. All solutions that are used to wash and rinse secondary containment, the sumps, the floor drains, and sinks will be collected in these tanks and transferred to Building 374 for treatment. Following this process, the tanks will be opened and the interiors inspected to determine if they contain any sludge. If sludge is discovered, it will be removed and handled as mixed waste.

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, prior to transfer to Building 374 for treatment. A finger print analysis (including pH and reactivity) will also be run. Comparisons of these data will be made to the Tier II action levels to judge the success or failure of clean closure by decontamination. In the event that any part of the system does not meet this standard, it will be removed or deferred to D&D under RFCA.

The closure of the interim status units in Building 444/447 began when building operations were suspended in 1991. Considerable amounts of building cleanup water have been placed into the floor drains, the sinks, and recovered by the sumps. All these

solutions were passed through the roll filters to remove particulate materials before transfer to Building 374 for treatment

The ground-water management and building cleanup that has taken place is responsible for the non-hazardous water that currently resides in the interim status units. Each sump, floor drain, and sink will be washed and rinsed. The water will be collected in the process waste tanks and sent to Building 374 for treatment. A combination of existing water quality data and newly-generated information will be utilized to demonstrate RCRA closure of these interim status units. They will then continue to be utilized for non-hazardous ground-water management.

9 0 CLOSURE ACTIVITIES FOR VALVE VAULTS 14 THROUGH 20

Valve vaults are the underground enclosures that contain the connecting piping, valving, sump pumps, and leak detection equipment that support the aqueous waste transfer lines. The valve vaults are constructed of concrete, and vary in size from 500 ft³ to 1200 ft³, depending on the branch lines and valving of the waste lines that pass through them. Gundel® or Hypalon® liners extend across the floors, and a minimum of four feet up all four walls, to provide an impervious surface that prevents potential releases to the environment.

Valve vaults 14 through 20 serve Buildings 123, 444/447, and 460, where process wastes are generated and transferred through to low-level line, to Building 374 for treatment. Closure activities for these valve vaults will include physical scrubbing and washing of the secondary containment (i.e., walls and floors), sump wells, and sump pumps with a solution of trisodium phosphate and water, or other suitable detergent, and rinsing with clean water. Used decontamination solution will be pumped to the sumps and transferred to Building 374 via the Building 444/447 low-level waste line. The final rinsate from each valve vault will be sampled to verify clean closure by decontamination. In the event that any part of the system does not meet this standard, it will be removed or deferred to D&D under RFCA.

10 0 DISPOSITION OF WASTES GENERATED DURING CLOSURE

This Closure Description Document is based on the assumption that the Site's waste management and treatment systems will be available to receive the cleanup waste, which will include waste waters to be treated in Building 374, equipment that is stripped out during the closure process (e.g., some of the small process waste sumps in Building 444/447), and other solid waste, in the form of used Personal Protective Equipment (PPE), rags, brushes, sponges, and other soft waste. Consistent with the objective of minimizing waste generation, all equipment used in the decontamination process will be decontaminated, whenever possible. Where it is not feasible to decontaminate the solid waste, these materials will be disposed of in compliance with federal and state regulations, and in accordance with RFETS procedures for handling such wastes.

11 0 RECORDKEEPING

The following closure records will be maintained onsite during closure activities, and at a federal repository for a minimum of 30 years following Closure Certification

- Sampling logs, including type, number, date of samples,
- Analytical results,
- Records of actions taken to decontaminate equipment or structures,
- Work instructions used to conduct the closure activities, and
- Other Certification documentation verifying that closure activities were conducted in compliance with the approved Closure Plan and this Closure Description Document

12 0 SUMMARY

Table 12-1 presents a summary of the closure activities associated with the Southwest portion of RCRA Unit 40

Table 12-1 Summary of Closure Activities for the Southwest Portion of RCRA Unit 40

Bldg	Unit #	Unit Description	P&ID Drawings (see Attachment B)	Current RCRA Status	Closure Method	Closure Document
122	N/A	Medical decontamination waste lines	N/A	N/A	Lines flushed with soap and water as a BMP	N/A
123	40	Lab waste lines, sumps and pump stations	N/A	Currently Undergoing RCRA Closure	Decontamination and removal	RF/RMRS-97-052, Closure Plan for Building 123 Components of RCRA Unit 40 (1/11/2/97)
428	40 1	Holding Tank D-853	N/A	To be RCRA Closed	Decontamination	Closure Plan for Intern Status Units (August 1997), and Closure Description Document for the Southwest Portion of RCRA Unit 40 (2/27/98)
444/447	39 01 39 02 40 02 40 03 40 04 40 05 40 06 40 07 40 35 40 36 40 37	Fabric/Roll Filter (B444) Fabric/Roll Filter (B447) Acid Waste Tank T-1 Acid Waste Tank T-2 Process Waste Tank T-2 Process Waste Tank T-3 Cyanide Waste Tank T-3 Cyanide Waste Tank T-4 T-4 ST-5 T-6	B39650-2050 & B39650-2332 B39650-2055 & B39650-2336 B39650-2053 & D39650-2050 B39650-2053 & D39650-2050 B39650-2050/2051/2052 & B39650-2330 B39650-2050/2051/2052 & B39650-2330 B39650-2053 & D39650-2050 B39650-2053 & D39650-2050 B39650-2050/2051/2052 & B39650-2331 B39650-2050/2051/2052 & B39650-2332 B39650-2055 & B39650-2336	RCRA Stable, to be RCRA Closed	Decontamination and removal	Closure Plan for Intern Status Units (August 1997), and Closure Description Document for the Southwest Portion of RCRA Unit 40 (2/27/98)
460	40 09 through 40 15	Holding tanks and sumps	N/A	RCRA Closed	Decontamination and removal	RCRA Closure Plan, Building 460 Process Waste System (10/19/95), Certification of RCRA Closure for the Building 460 Process Waste System (9/16/95)
Valve Vaults	40 63 through 40 69	Valve vaults servicing Buildings 122, 123, 444/447 & 460	N/A	To be RCRA Closed	Decontamination	Closure Plan for Intern Status Units (August 1997) and Closure Description Document for the Southwest Portion of RCRA Unit 40 (2/27/98)

ATTACHMENT A

Volatile Organics Data for Sample Taken from the
Building 460 Line at Valve Vault 18,
Showing 1ppb Benzene (<PQL)

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO
68502

Lab Name GLAB Contract

Lab Code GLAB Case No 111275 SAS No 96J1 SDG No

Matrix (soil/water) WATER Lab Sample ID C3016008

Sample wt/vol 5 (g/mL) ML Lab File ID MAR2906

Level (low/med) LOW Date Received 3/28/96

‡ Moisture not dec 100 Date Analyzed 3/29/96

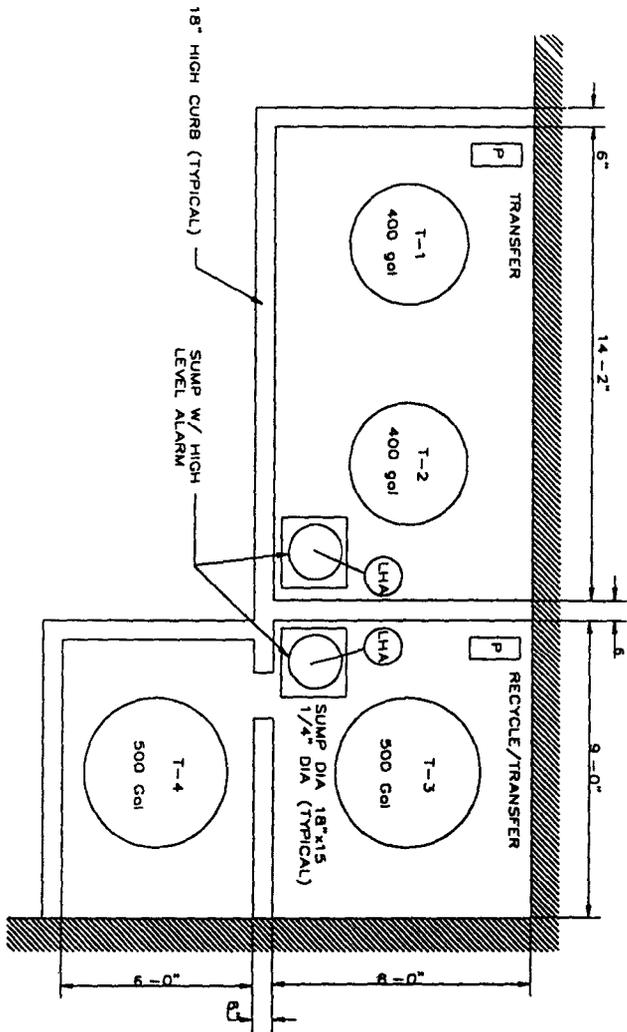
Column (pack/cap) CAP Dilution Factor 1 00

CAS NO	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg) UG/L	Q
74-87-3	-----Chloromethane	10	U
74-83-9	-----Bromomethane	10	U
75-01-4	-----Vinyl Chloride	10	U
75-00-3	-----Chloroethane	10	U
75-09-2	-----Methylene Chloride	5	U
67-64-1	-----Acetone	25	B
75-15-0	-----Carbon Disulfide	5	U
75-35-4	-----1,1-Dichloroethene	5	U
75-34-3	-----1,1-Dichloroethane	5	U
540-59-0	-----1,2-Dichloroethene (total)	5	U
67-66-3	-----Chloroform	4	J
107-06-2	-----1,2-Dichloroethane	5	U
78-93-3	-----2-Butanone	57	B
71-55-6	-----1,1,1-Trichloroethane	5	U
56-23-5	-----Carbon Tetrachloride	5	U
75-27-4	-----Bromodichloromethane	5	U
78-87-5	-----1,2-Dichloropropane	5	U
10061-01-5	-----cis-1,3-Dichloropropene	5	U
79-01-6	-----Trichloroethene	5	U
124-48-1	-----Dibromochloromethane	5	U
79-00-5	-----1,1,2-Trichloroethane	5	U
71-43-2	-----Benzene	1	J
10061-02-6	-----trans-1,3-Dichloropropene	5	U
75-25-2	-----Bromoform	5	U
108-10-1	-----4-Methyl-2-Pentanone	10	U
591-78-6	-----2-Hexanone	10	U
127-18-4	-----Tetrachloroethene	5	U
79-34-5	-----1,1,2,2-Tetrachloroethane	5	U
108-88-3	-----Toluene	5	U
108-90-7	-----Chlorobenzene	5	U
100-41-4	-----Ethylbenzene	5	U
100-42-5	-----Styrene	4	J
36777-61-2	-----Xylene (m p)	5	U
60-29-7	-----Ethyl Ether	5	U
75-69-4	-----Trichlorofluoromethane	5	U
76-13-1	-----Trich-trifl ethane	5	U
141-78-6	-----Ethyl Acetate	5	U
95-47-6	-----Xylene (o)	5	U
106-46-7	-----1,4-Dichlorobenzene	5	U

ATTACHMENT B

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

Drawing Number(s)	RCRA Unit	System	Page(s)
B39650-2053	40 02 40 03 40 06 40 07	Acid Waste Tank T-1 Acid Waste Tank T-2 Cyanide Waste Tank T-3 Cyanide Waste Tank T-4	B-2
D39650-2050	40 02-40 03 40 06-40 07	Secondary Containment for the Acid & Cyanide Waste Tanks	B-3
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 Tank T-4 Sump Tank ST-5 Roll/Fabric Filter (B444)	B-4 through B-6
B39650-2330	40 04 40 05	Secondary Containment for Process Waste Tank T-2 Process Waste Tank T-3	B-7
B39650-2331	40 35	Secondary Containment for Tank T-4	B-8
B39650-2332	40 36 39 01	Secondary Containment for Tank ST-5 Roll/Fabric Filter (B444)	B-9
B39650-2055	40 37 39 02	Tank T-6 Roll/Fabric Filter (B447)	B-10
B39650-2336	40 37 39 02	Secondary Containment for Tank T-6 Roll/Fabric Filter (B447)	B-11



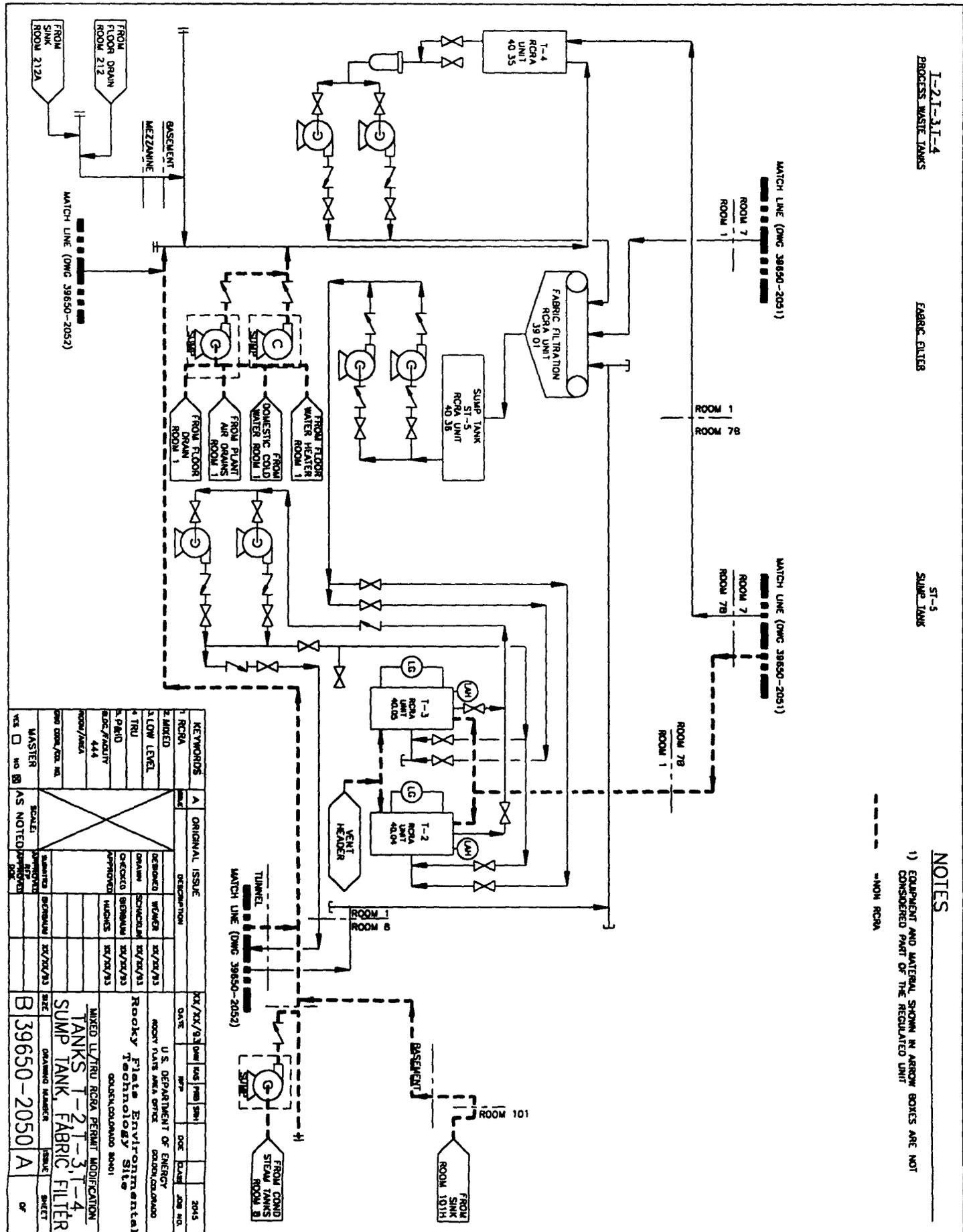
PLAN
NTS

DATE	DESCRIPTION	BY

NO.	DESCRIPTION	DATE	BY	REVISION
1	ISSUED FOR CONSTRUCTION	02/27/98		
2				
3				

PROJECT NO.	09650-2050B
PROJECT NAME	TANKS, RECYLE UNIT
PROJECT LOCATION	
PROJECT OWNER	
PROJECT MANAGER	
PROJECT ENGINEER	
PROJECT ARCHITECT	
PROJECT CONTRACTOR	
PROJECT SUBMITTER	
PROJECT DATE	
PROJECT SCALE	
PROJECT SHEET NO.	
PROJECT SHEET TOTAL	

COMPUTER-GENERATED NO MANUAL CHANGES ALLOWED



1-2-1-3-1-4
PROCESS WASTE TANKS

FABRIC FILTER

ST-5
SLUMP TANK

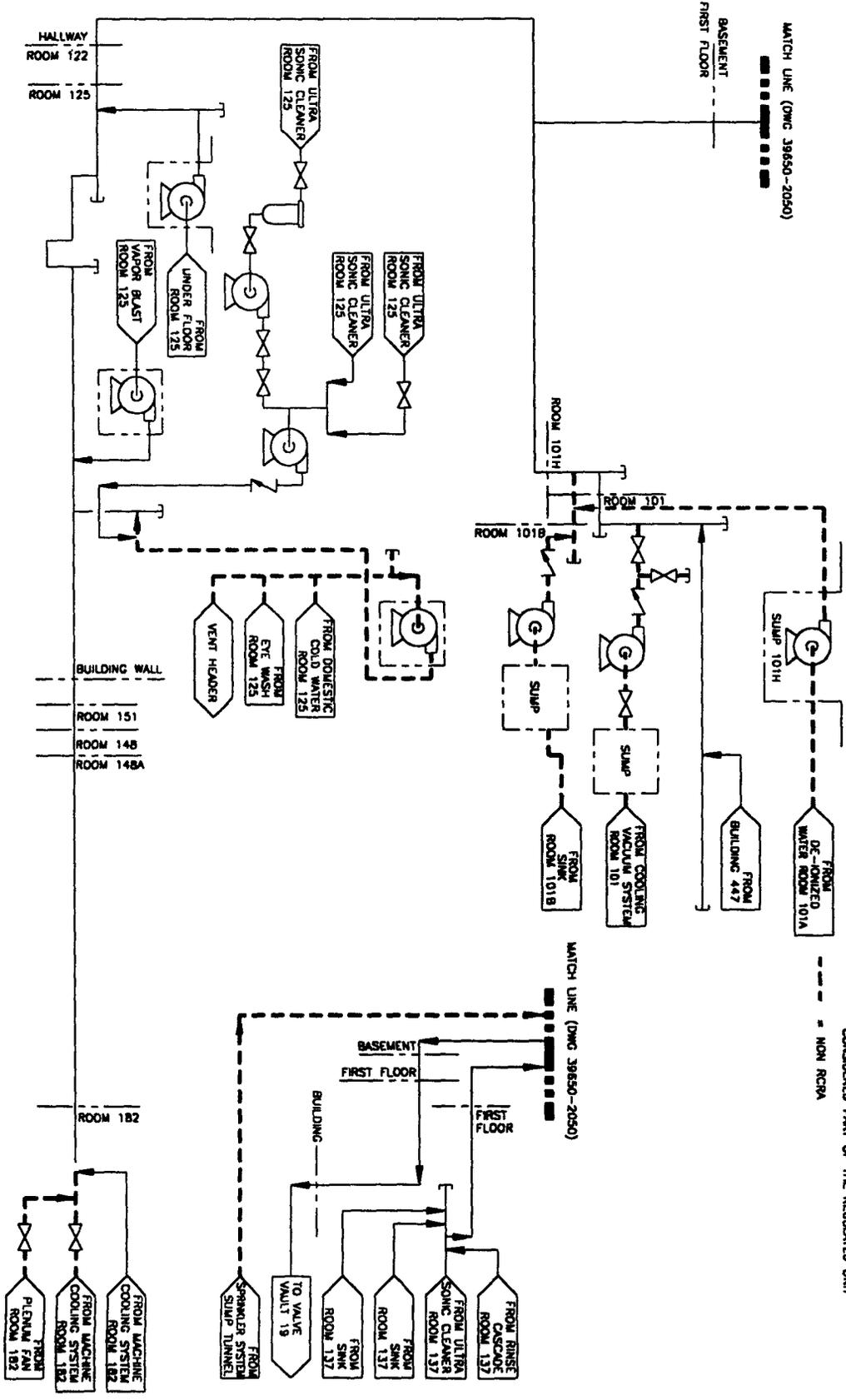
NOTES

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

--- NON RCRA

KEYWORDS	A	ORIGINAL ISSUE	DATE	DESCRIPTION	BY	CHKD	DATE	JOB NO.
1 RCRA								
2 MISC								
3 LOW LEVEL								
4 TRU								
5 PLAD								
6 DOC/FACILITY								
7 444								
8 RCRA/MSA								
9 RCRA/MSA								
10 RCRA/MSA								
11 RCRA/MSA								
12 RCRA/MSA								
13 RCRA/MSA								
14 RCRA/MSA								
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99 RCRA/MSA								
100 RCRA/MSA								

U.S. DEPARTMENT OF ENERGY
Rooky Plate Environmental
Technology Site
MIXED LL/TRU RCRA PERMIT MODIFICATION
TANKS T-2, T-3, T-4
SLUMP TANK, FABRIC FILTER
39650-2050 A

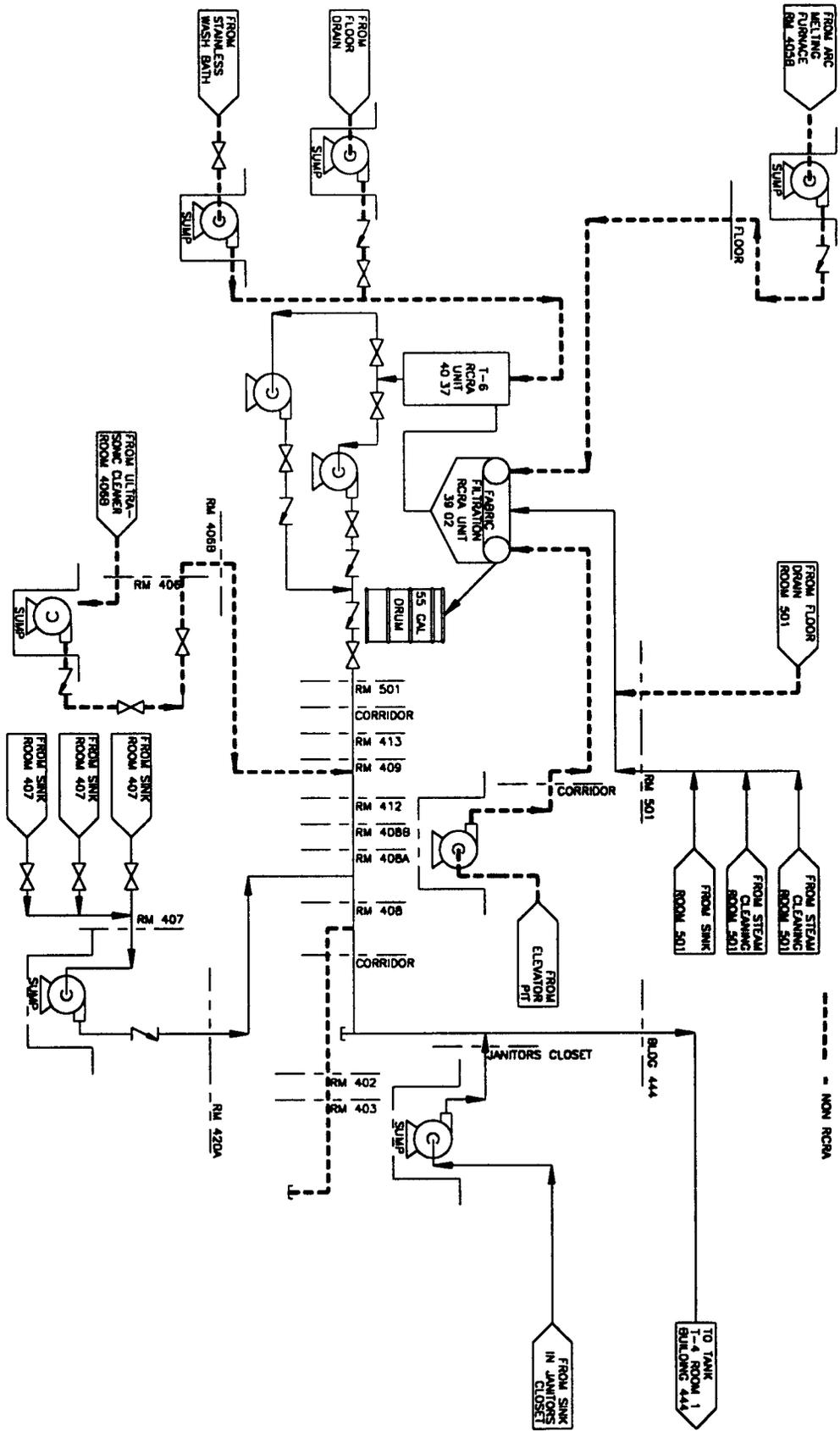


NOTES

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

KEYWORDS		ORIGINAL ISSUE		DATE	
1 RCRA	2 MARKED	DESIGNED	REVISED	02/27/93	02/27/93
3 FLOW LEVEL	4 TRU	CHECKED	REVISION	02/27/93	02/27/93
5 PAID	6 DEC./FACILITY	APPROVED	HIGHNESS	02/27/93	02/27/93
7 ROOM/AREA	8 NO. CON./CON. NO.	9 MASTER	10 AS NOTED	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36
37	38	39	40	41	42
43	44	45	46	47	48
49	50	51	52	53	54
55	56	57	58	59	60
61	62	63	64	65	66
67	68	69	70	71	72
73	74	75	76	77	78
79	80	81	82	83	84
85	86	87	88	89	90
91	92	93	94	95	96
97	98	99	100	101	102

U.S. DEPARTMENT OF ENERGY
 ROCKY PLATE ENVIRONMENTAL
 TECHNOLOGY SITE
 444



T-6
PROCESS WASTE TANK

FABRIC FILTER

NOTES

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

--- NON RCRA

KEYWORDS		ORIGINAL ISSUE		DATE		DATE		DATE		DATE	
1 RCRA	2 LIMITED	DESIGNED	DESIGNED	MM/XX/93	MM/XX/93	MM/XX/93	MM/XX/93	MM/XX/93	MM/XX/93	MM/XX/93	MM/XX/93
3 FLOW LEVEL	4 TNU	DRAWN	DESIGNED	XX/XX/93	XX/XX/93	XX/XX/93	XX/XX/93	XX/XX/93	XX/XX/93	XX/XX/93	XX/XX/93
5 P&ID	6 RCRA/ACUITY	APPROVED	APPROVED	XX/XX/93	XX/XX/93	XX/XX/93	XX/XX/93	XX/XX/93	XX/XX/93	XX/XX/93	XX/XX/93
7 447	8 ROOM/AREA	ALL	ALL								
MASTER		SCALE		SUBMITTED		REVISION		DATE		DATE	
yes	no	AS NOTED	AS NOTED	DATE	DATE	DATE	DATE	DATE	DATE	DATE	DATE
U.S. DEPARTMENT OF ENERGY		ROCKY PLAINS ENVIRONMENTAL		TANK T-6, FABRIC FILTER		DRAWING NUMBER		ISSUE		SHEET	
39650-2055		A		B		A		A		A	

ATTACHMENT C

**RCRA Unit Information Sheets
Building 444/447**

	<u>page</u>
RCRA Unit 39 01, Roll Filter (B444)	C-2
RCRA Unit 39 02, Roll Filter (B447)	C-3
RCRA Unit 40 02, Acid Waste Tank T-1	C-4
RCRA Unit 40 03, Acid Waste Tank T-2	C-5
RCRA Unit 40 04, Process Waste Tank T-2	C-6
RCRA Unit 40 05, Process Waste Tank T-3	C-7
RCRA Unit 40 06, Cyanide Waste Tank T-3	C-8
RCRA Unit 40 07, Cyanide Waste Tank T-4	C-9
RCRA Unit 40 35, Tank T-4	C-10
RCRA Unit 40 36, Sump Tank ST-5	C-11
RCRA Unit 40 37, Tank T-6	C-12

RCRA Unit Information Sheet

Unit Number	39 01
Building	444
Room	1
Unit Description	Fabric Filtration
Function	Treatment
Treatment Unit Number	N/A
Capacity	75 gallons
Dimensions	5 6 ft L x 0 85 ft H x 3 0 ft W
Material of Construction	
Approved Waste Codes	D001, D002, D004, D005, D007, D008, D018 D019, D028, D029, D035, D038, D040, D043 F001, F002, F003, F007, F009
Waste Description	Liquid low-level mixed waste
Secondary Containment	Coated concrete

RCRA Unit Information Sheet

Unit Number	39 02
Building	447
Room	31
Unit Description	Fabric Filtration
Function	Treatment
Treatment Unit Number	N/A
Capacity	75 gallons
Dimensions	6 7 ft L x 0 85 ft H x 3 7 ft W
Material of Construction	
Approved Waste Codes	D001, D002, D004, D005, D007, D008, D018 D019, D028, D029, D035, D038, D040, D043 F001, F002, F003, F007, F009
Waste Description	Liquid low-level mixed waste
Secondary Containment	Coated concrete

RCRA Unit Information Sheet

Unit Number	40 02
Building	444
Room	9A
Unit Description	Acid Rinse Waste Tank
Function	Storage
Tank Number	1
Capacity	400 gallons
Dimensions	4 ft D x 3 ft 8 5 in H
Material of Construction	Stainless steel 304L
Approved Waste Codes	D001, D002, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D028, D029, D035, D038, D040, D043, F001, F002, F003, F005, F007, F008, F009
Waste Description	Liquid low-level mixed waste
Secondary Containment	Coated concrete

RCRA Unit Information Sheet

Unit Number	40 03
Building	444
Room	9A
Unit Description	Acid Rinse Waste Tank
Function	Storage
Tank Number	2
Capacity	400 gallons
Dimensions	4 ft D x 3 ft 8 5 in H
Material of Construction	Stainless steel 304L
Approved Waste Codes	D001, D002, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D028, D029, D035, D038, D040, D043, F001, F002, F003, F005, F007, F008, F009
Waste Description	Liquid low-level mixed waste
Secondary Containment	Coated concrete

RCRA Unit Information Sheet

Unit Number	40 04
Building	444
Room	1
Unit Description	Process Waste Tank
Function	Storage
Tank Number	T-2
Capacity	4300 gallons
Dimensions	12 7 ft L x 7 6 ft D
Material of Construction	Carbon Steel
Approved Waste Codes	D001, D002, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D028, D029, D035, D038, D040, D043, F001, F002, F003, F005, F007, F008, F009
Waste Description	Liquid low-level mixed waste
Secondary Containment	Coated concrete

RCRA Unit Information Sheet

Unit Number	40 05
Building	444
Room	1
Unit Description	Process Waste Tank
Function	Storage
Tank Number	T-3
Capacity	4300 gallons
Dimensions	12 7 ft L x 7 6 ft D
Material of Construction	Carbon Steel
Approved Waste Codes	D001, D002, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D028, D029, D035, D038, D040, D043, F001, F002, F003, F005, F007, F008, F009
Waste Description	Liquid low-level mixed waste
Secondary Containment	Coated concrete

RCRA Unit Information Sheet

Unit Number	40 06
Building	444
Room	9A
Unit Description	Cyanide Rinse Waste Tank
Function	Storage
Tank Number	3
Capacity	500 gallons
Dimensions	5 ft D x 3 ft 4 in H
Material of Construction	Stainless Steel 304L
Approved Waste Codes	D001, D002, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D028, D029, D035, D038, D040, D043, F001, F002, F003, F005, F007, F008, F009
Waste Description	Liquid low-level mixed waste
Secondary Containment	Coated concrete

RCRA Unit Information Sheet

Unit Number	40 07
Building	444
Room	9A
Unit Description	Cyanide Rinse Waste Tank
Function	Storage
Tank Number	4
Capacity	500 gallons
Dimensions	5 ft D x 3 ft 6 in H
Material of Construction	Stainless Steel 304L
Approved Waste Codes	D001, D002, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D028, D029, D035, D038, D040, D043, F001, F002, F003, F005, F007, F008, F009
Waste Description	Liquid low-level mixed waste
Secondary Containment	Coated concrete

RCRA Unit Information Sheet

Unit Number	40 35
Building	444
Room	1
Unit Description	Process Waste Tank
Function	Storage
Tank Number	T-4
Capacity	500 gallons
Dimensions	5 ft L x 4 5 ft D
Material of Construction	Polyethylene
Approved Waste Codes	D001, D002, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D028, D029, D035, D038, D040, D043, F001, F002, F003, F005, F007, F008, F009
Waste Description	Liquid low-level mixed waste
Secondary Containment	Coated concrete

RCRA Unit Information Sheet

Unit Number	40 36
Building	444
Room	1
Unit Description	Process Waste Tank
Function	Storage
Tank Number	ST-5
Capacity	148 gallons
Dimensions	4 3 ft L x 2 1 ft H x 2 2 ft W
Material of Construction	Fiberglass reinforced plastic with a polyethylene liner
Approved Waste Codes	D001, D002, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D028, D029, D035, D038, D040, D043, F001, F002, F003, F005, F007, F008, F009
Waste Description	Liquid low-level mixed waste
Secondary Containment	Coated concrete

RCRA Unit Information Sheet

Unit Number	40 37
Building	447
Room	31
Unit Description	Process Waste Tank
Function	Storage
Tank Number	T-6
Capacity	200 gallons
Dimensions	3 3 ft L x 3 2 ft H x 3 3 ft W
Material of Construction	Fiberglass reinforced plastic with a polyethylene liner
Approved Waste Codes	D001, D002, D004, D005, D006, D007, D008, D009, D010, D011, D018, D019, D028, D029, D035, D038, D040, D043, F001, F002, F003, F005, F007, F008, F009
Waste Description	Liquid low-level mixed waste
Secondary Containment	Coated concrete

