

INTERIM STATUS CLOSURE PLAN SOLID WASTE MANAGEMENT UNIT 26

U.S. DEPARTMENT OF ENERGY

Rocky Flats Plant
Transuranic Mixed Wastes

CO7890010526



Rockwell International
Aerospace Operations
Rocky Flats Plant

SEPTEMBER 1989

ADMIN RECORD

A-SW-000363

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By *[Signature]*
Date 4/21/93

**INTERIM STATUS CLOSURE PLAN
SOLID WASTE MANAGEMENT UNIT 26**

**For U.S. D O.E. - Rocky Flats Plant
Hazardous and Radioactive Mixed Wastes**

C07890010526

September 1989

Rockwell International

**Reviewed for Classification
by Barbara Kerr Greer
Date September 19, 1989**

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CO7890010526

REGULATORY CHECKLIST FOR DRUM STORAGE AREA

6 CCR 1007-3 PART/REQUIREMENT	[40 CFR] [SECTION]	CLOSURE PLAN SECTION
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Closure Performance Standard [265.111] 3.1

The owner or operator must close his facility in a manner that:

- a. Minimizes the need for further maintenance; and
- b. Controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous constituents, leachate, contaminated runoff, or hazardous waste decomposition products to the ground or surface water or to the atmosphere; and
- c. Complies with the closure requirements of this Subpart including, but not limited to the requirements of Sections 265.197, 265.228, 265.258, 265.280, 265.310, 265.351, 265.381, and 265.404.

Detailed Description of Steps Necessary to Close the Storage Facility:
265.112(b)1 [265.112(b)1]

3.2, 4.0 5.0,
6.0, 7.0

Content of Plan. The plan must identify the steps necessary to perform partial and/or final closure of the facility at any point during its active life. The closure plan must include, at least:

- 1. A description of how each hazardous waste management unit at the facility will be closed in accordance with Section 265.111; and

6CCR 1007-3
PART/REQUIREMENT

[40 CFR]
[SECTION]

CLOSURE PLAN
SECTION

Identification of Maximum Extent of Operation of the Storage Facility:
265.112(b)2 [265.112(b)2]

2.2

2. A description of how final closure of the facility will be conducted in accordance with Section 265.111. The description must identify the maximum extent of the operations which will be unclosed during the active life of the facility; and

Removal and Management of Hazardous Wastes:

Estimate of Maximum Inventory of Hazardous Waste in the Storage Facility:
265.112(b)3 [265.112(b)3]

2.2.2

3. An estimate of the maximum inventory of hazardous wastes ever on-site over the active life of the facility and a detailed description of the methods to be used during partial closures and final closure, including, but not limited to, methods for removing, transporting, treating, storing, or disposing of all hazardous wastes, and identification of the types(s) of the off-site hazardous waste management units to be used, if applicable; and

Detailed Description of Removal of Hazardous Waste Inventory:
265.112(b)3 [265.112(b)3]

4.0

265.114 [265.114]

4.0

When closure is completed, all facility equipment and structures must have been properly disposed of, or decontaminated by removing all hazardous waste and residues.

Identification and Type of Off-Site Hazardous Waste Management Unit(s):
265.112(b)3 [265.112(b)3]

5.0

6 CCR 1007-3
PART/REQUIREMENT

[40 CFR]
[SECTION]

CLOSURE PLAN
SECTION

Decontamination and Removal of Hazardous Waste Residues:

Criteria for Determining the Extent of Decontamination Necessary:
265.112(b)4 [265.112(b)4] 6.1

A detailed description of the steps needed to remove or decontaminate all hazardous waste residues and contaminated containment system components, equipment, structures, and soils during partial and final closure, including but not limited to, procedures for cleaning equipment and removing contaminated soils, methods for sampling and testing surrounding soils, and criteria for determining the extent of decontamination necessary to satisfy the closure performance standard;

Detailed Description of Decontamination Steps:
265.112(b)4 [265.112(b)4] 6.0

Procedures for Cleaning Equipment and Structures and Removing Contaminated Soils, and Detailed Description of Decontamination:
265.112(b)4 [265.112(b)4] 6.0

265.114 [265.114]

A Detailed Description of Removal of Contaminated Equipment and Hazardous Waste Residues:
265.112(b)4 [265.112(b)4] 6.3, 6.4, 6.6

265.114 [265.114]

Methods for Sampling and Testing to Demonstrate Success of Decontamination:
265.112(b)4 [265.112(b)4] 7.0

265.114 [265.114]

Detailed Closure Schedule:

265.112(b)6

[265.112(b)6]

8.0

A schedule for closure of each hazardous waste management unit and for final closure of the facility. The schedule must include, at a minimum, the total time required to close each hazardous waste management unit and the time required for intervening closure activities which will allow tracking of the progress of partial and final closure. (For example, in the case of a landfill unit, estimates of the time required to treat or dispose of all hazardous waste inventory and of the time required to place a final cover must be included.);

Time Allowed for Closure:

265.113b

[265.113b]

8.0

The owner or operator must complete closure activities in accordance with the approved closure plan and within 180 days after receiving the final volume of wastes or 180 days after approval of the closure plan, if that is later. The Department may approve a longer closure period using the procedures under 265.112(c) if the owner or operator demonstrates that;

- 1.i. The closure activities will, of necessity, take him longer than 180 days to complete;
 - ii.A. The facility has the capacity to receive additional waste;
 - B. There is a reasonable likelihood that a person other than the owner or operator will recommence operation of the site;
 - C. Closure of the facility would be incompatible with continued operation of the site; and
2. He has taken and will continue to take all steps to prevent threats to human health and the environment from the unclosed but inactive facility.

Certification of Closure:
265.115

[265.115]

13.0

Certification of Closure. When closure is completed, the owner or operator must submit to the Department certification both by the owner or operator and by an independent registered professional engineer that the facility has been closed in accordance with the specifications in the approved closure plan.

Closure Cost Estimates, Financial Assurance and Liability Coverage:
266.12

[265.142]

9.0

- a. The owner or operator must prepare a written estimate, in current dollars, of the cost of closing the facility in accordance with the closure plan as specified in 264.112. The closure cost estimates must equal the cost of closure at the point in the facility's operating life when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan.
- b. During the operating life of the facility, the owner or operator must adjust annually the closure cost estimates. The adjustment must be made using an inflation factor derived from the annual Implicit Price Deflator for Gross National Product as published by the U.S. Department of Commerce in its Survey of Current Business. The inflation factor is the result of dividing the latest published annual deflator by the deflator for the previous year. Adjustments to the cost estimates are made by multiplying the latest closure cost estimate by the latest inflation factor. Facilities using a financial mechanism other than the financial test or corporate guarantee should use the deflator published close to the anniversary date of the instrument. Facilities using the financial test or corporate guarantee should use the deflator published nearest the fiscal year end reporting date required by 266.14(i)5. The adjust closure cost (ACC) estimate is calculated as follows:

6 CCR 1007-3
PART/REQUIREMENT

[40 CFR]
[SECTION]

CLOSURE PLAN
SECTION

ACC=CCC x IF

ACC= Adjusted closure cost,
CCC= Current closure cost estimate as determined in paragraph (a) above.

IF = Inflation factor = LPD/PYD

LPD= Latest published Deflator
PYD= Previous year's Deflator

- c. The owner or operator must revise the closure cost estimate whenever a change in the closure plan increases the cost of closure. The revised closure cost estimate must be adjusted for inflation as specified in 266.12(b)
- d. The owner or operator must keep the following at the facility during the operating life of the facility: The latest closure cost estimate prepared in accordance with 255.12(a) and (c) and, when this estimate has been adjusted in accordance with 266.23(b), the latest adjusted closure cost estimate.

x

**INTERIM STATUS CLOSURE PLAN FOR
SOLID WASTE MANAGEMENT UNIT NO. 26
BUILDING 881, ROOM 266B**

1 0 INTRODUCTION

1.1 Plant Location and Mission

The U S Department of Energy's Rocky Flats Plant is located in north-central Colorado, northwest of the City of Denver (Figure 1) The plant is located in Sections 1 through 4 and 9 through 15 of T 1 S, R 70 W The facility's EPA identification number is CO 7890010526 The mailing address is

U.S Department of Energy
Rocky Flats Plant
P O Box 928
Golden, CO 80402

The facility contact is:

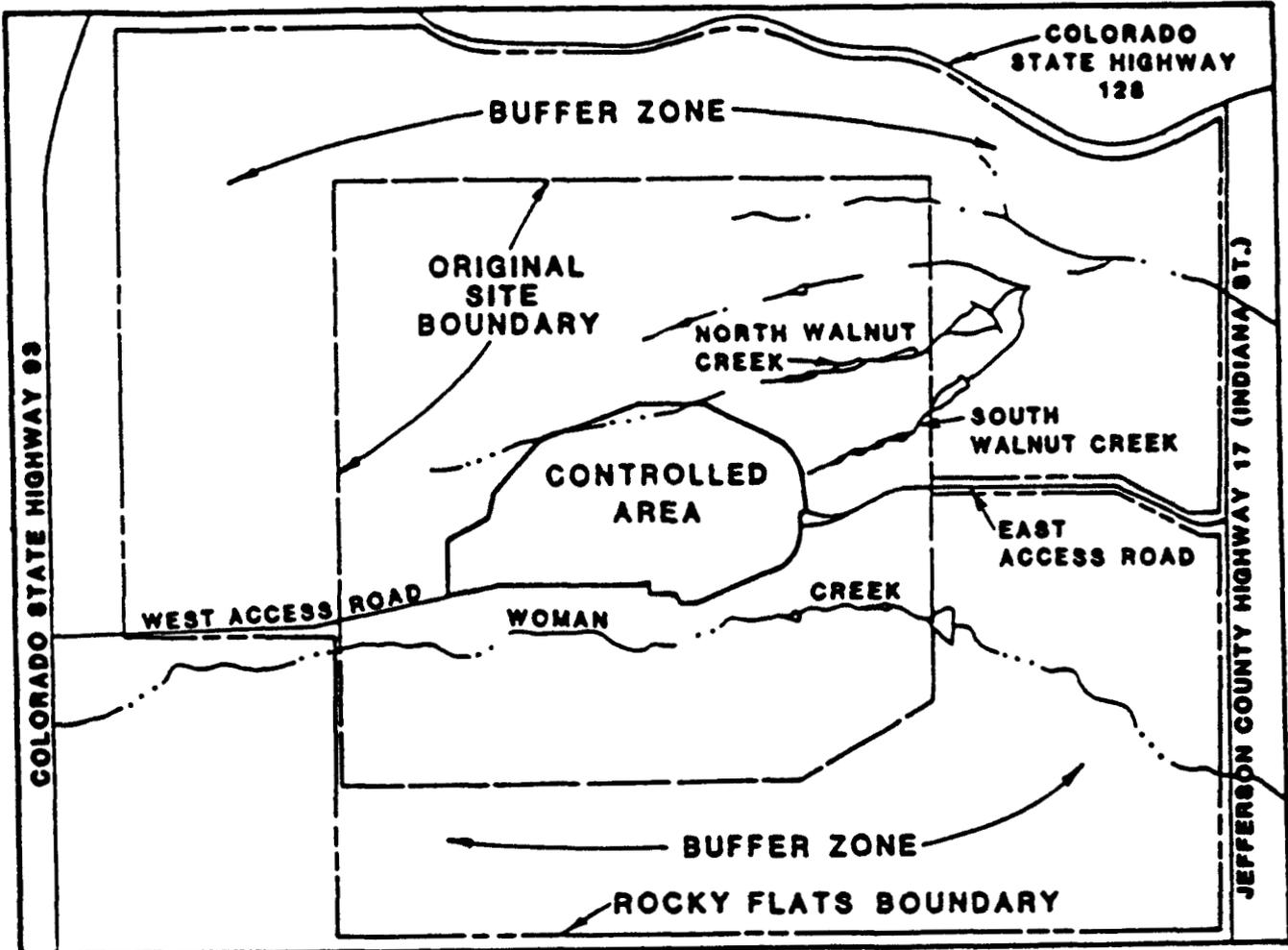
Mr. David P Simonson, Manager
Phone: 303-966-2025

Rockwell International is the prime operating contractor for the Rocky Flats Plant (since June 1975) under the general direction of the U S Department of Energy (DOE), Rocky Flats Area Office, which in turn, reports to the U.S Department of Energy, Albuquerque Operations Office As a government-owned and contractor-operated facility, the Rocky Flats Plant comprises a portion of the nationwide nuclear weapons production complex

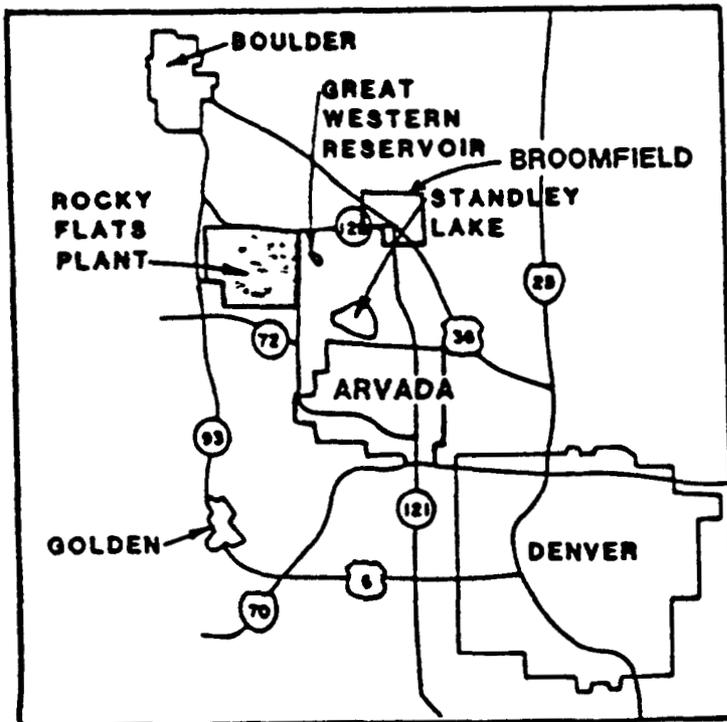
The primary Plant mission is to produce plutonium components for nuclear weapons Plutonium, uranium, beryllium, and stainless steel parts are fabricated at the Plant and shipped off-site for final assembly Additional activities include chemical processing to recover plutonium from scrap material, metallurgical research and development, machining, assembly, non-destructive testing, coatings, remote engineering, chemistry, and physics Waste handling operations at the Rocky Flats Plant include storage, transport, treatment, and packaging of waste materials generated on-site The waste forms that are handled include hazardous chemical waste, transuranic (TRU) waste, low level radioactive waste, non-hazardous chemical waste, and combinations thereof Specifically, this Interim Status Closure Plan addresses containerized storage of low level mixed waste

1.2 Interim Status Closure Plan Purpose

The intent of this Interim Status Closure Plan is to provide for closure of Building 881, Room 266B, solid waste management unit (SWMU) No 26 in compliance with Part 265 closure regulations This plan addresses Colorado Hazardous Waste Regulations under CHWR 265, Subpart G, Closure and Post-Closure, Section 265, Subpart I, Use and Management of Containers and equivalent Federal regulations



APPROXIMATE SCALE 1"=3,300'



APPROXIMATE SCALE 1"=40,000'



VICINITY MAP


INTERIM STATUS CLOSURE PLAN
ROCKY FLATS PLANT
GOLDEN, COLORADO

FIGURE 1

2.0 FACILITY DESCRIPTION

2.1 Facility Location and Specifications

Building 881 is located in the southeast portion of the controlled area illustrated in Figure 2. The majority of this building is underground. Room 266B, which provides solid waste drum storage, measures 10 feet by 20 feet. The floor is constructed of concrete sealed with epoxy paint, and there are no berms. The walls are constructed of concrete and sealed with latex paint. The 55-gallon drums of mixed waste are stored in three rows, each row separated by a two foot aisle.

2.2 Facility Description

2.2.1 Periods of Operation

Since May 16, 1989, Unit 26 has been operating as a 90-day mixed waste drum storage area. Prior to May 16, 1989, Unit 26 operated as a long term storage area for mixed wastes, and was included in the hazardous and low level mixed waste RCRA Part B Permit Application.

2.2.2 Maximum Waste Inventory

The maximum waste storage capacity of Room 266B in Building 881 is 29 steel drums of 55-gallons each, or 8 cubic yards of solid waste.

2.2.3 Types of Waste Managed

Unit 26 is used to store containerized low-level radioactive mixed wastes. These wastes are generated in the General Laboratory as laboratory process waste and consist of four types:

- A) Low-level combustible (paper, Kimwipes, surgeons gloves, and plastics contaminated with U-238)
- B) Low-level metal and glass (contaminated with U-238)
- C) Low-level combustible hazardous (same as A with the additional possibility of contamination with hazardous solvents, or metals)
- D) Low-level glass and metal hazardous (contaminated with hazardous materials)

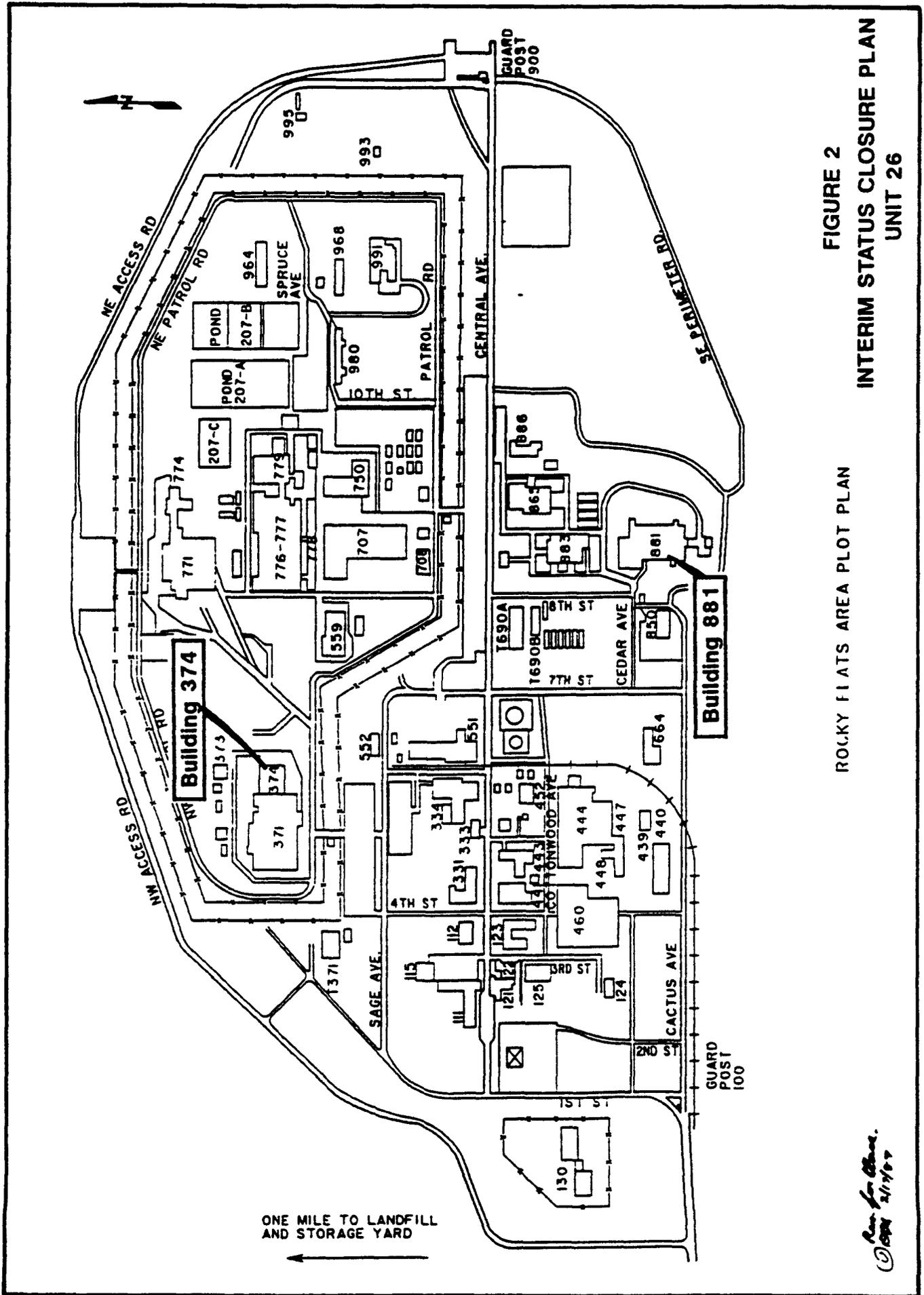


FIGURE 2
 INTERIM STATUS CLOSURE PLAN
 UNIT 26

ROCKY FLATS AREA PLOT PLAN

ONE MILE TO LANDFILL
 AND STORAGE YARD

Rex for Olson
 2/1/87

Table 1 identifies the wastes approved for storage in Unit 26, along with corresponding waste stream identification numbers. The waste stream numbers are a result of a waste stream identification and characterization study conducted at the Rocky Flats Plant in 1986 and 1987. The results of this study are included as part of the RCRA Part B Operating Permit Application for Hazardous and Low Level Mixed Wastes (Rockwell, 1987). The solvents noted in Item C above include the following volatile organics: carbon tetrachloride, acetone, methyl alcohol and butyl alcohol. Inorganic wastes generated in the General Laboratory include the following Target Analyte List (TAL) metals:

- Aluminum
- Antimony
- Arsenic
- Barium
- Beryllium
- Cadmium
- Calcium
- Chromium
- Cobalt
- Copper
- Iron
- Lead
- Magnesium
- Manganese
- Mercury
- Nickel
- Potassium
- Selenium
- Silver
- Sodium
- Thallium

One Item Description Code (IDC), 073, is currently being used for all hazardous and low-level radioactive mixed wastes produced in the General Laboratory and stored in Unit 26. The IDC identifies the physical and chemical form of the material in process, and is used to account for radioactive materials throughout the plant.

2.2.4 Waste Handling Description

All wastes stored in Unit 26 are generated in the General Laboratory, Building 881, Rooms 137, 255, 266, 272, and 276. The wastes are reviewed at the point of generation or at initial satellite collection areas in these rooms, and placed in 55-gallon drums on a continuous basis. Identification is by type of waste, date, and name of generator. After a drum is full, it is transferred to Unit 26 for storage. Drums arrive at Unit 26 via one of two transportation routes, depending on the point of collection within the General Laboratory. Rooms 255, 266, 272, and 276 are on the same floor as Unit 26. Therefore, wastes generated in these rooms are transported through the hallway by drum cart to the storage area. Room 137, however, is one floor below Unit 26. Drummed waste from Room 137 is first transported up one floor by elevator and then moved approximately 300 feet to Unit 26 with a drum cart.

Hazardous Waste Operations transfers drums containing hazardous chemical waste from Unit 26 to Unit 13, Building 884 for long term storage. These drums are then transported to Unit 10 Building 664, Shipping Storage Area to await shipment to an acceptable off-site disposal facility. Drums containing radioactive mixed wastes are transported to Building 889 for repackaging.

2.2.5 Monitoring and Containment Systems

The floor of Room 266B is constructed of concrete sealed with epoxy paint. The steel drums are stored directly on the floor. Aisle space (minimum 1-foot 3-inches) is maintained to allow access for weekly container inspections to visually assess the structural integrity of the drums and to check for leaks and corrosion.

TABLE 1
WASTES APPROVED FOR STORAGE IN UNIT 26

DESCRIPTION	*WASTE STREAM IDENTIFICATION NUMBER
Waste Resin	03240
Planchets	03250
Solid Waste	03300
Solid Waste	03320
Solid Waste	03410
Solid Waste	03450
Solid Waste	03480
Solid Waste	03770
Stain Steel, Titanium & Niobium Oxide	04410
Used Graphite Electrodes	04420
Solid Waste	04460
Crucibles	04510
Dirty Kimwipes	04760
Solid Waste	05450
Kimwipes	05490
Filter Residue	05500
Used Filter Media	05570

• RCRA Part B Operating Permit Application for
 U.S Department of Energy - Rocky Flats Plant
 Hazardous and Low Level Mixed Wastes
 (December 15, 1987).

226 Releases

According to interviews of Rockwell operations and supervisory personnel, a release of waste from the drums stored in Room 266B has not occurred. Seepage of rainwater into the room may have introduced analytes leached from building materials into Unit 26.

3.0 INTERIM STATUS CLOSURE PLAN SUMMARY

3.1 Closure Activities

This interim status closure plan has been prepared to meet the performance standards of 6 CCR 1007-3, Section 265.111. The promulgated standards require a facility be closed in a manner that:

- Minimizes the need for further maintenance, and
- Controls, minimizes or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of hazardous waste, hazardous waste constituents, leachate, contaminated rainfall, or waste decomposition products to the ground or surface waters or to the atmosphere

3.2 Interim Status Closure Plan

The progression of activities necessary to complete closure is as follows:

- Removal of "90-day" inventory from Room 266B
- Contamination characterization by surface wipe testing
- Decontamination of surfaces in Room 266B (if required)
- Decontamination verification (if required)
- Certification of closure

It is believed that decontamination of Room 266B can be achieved. If decontamination is determined to be impracticable, then an amended closure plan will be submitted within 30 days of this unexpected event.

3.3 Closure Schedule

This closure plan is being submitted at least 45 days prior to initiation of final closure of the unit. Once the plan is approved, the CDH and the EPA Regional Administrator will be notified of the intent to close Unit 26 45 days prior to beginning the closure. Decontamination of the unit will be accomplished within 90 days from the beginning of closure.

If the unit is shown to be sufficiently clean after one decontamination, closure will be certified 180 days after closure begins. If decontamination is not achieved at this point, an amended closure plan will be submitted within 30 days after this unexpected event.

3.4 Administration of Interim Status Closure Plan

The interim status closure plan for the Unit 26 Drum Storage Area will be maintained at the Rocky Flats Area Office, Building 115, US Department of Energy. The person responsible for storing and updating this copy of the closure plan is

Mr David P Simonson, Manager
U.S. Department of Energy
Rocky Flats Plant
P O Box 928
Golden, CO 80402
Phone (303) 966-2025

4.0 REMOVAL OF HAZARDOUS WASTE INVENTORY

The "90-day" mixed low level radioactive and hazardous waste inventory in Unit 26 will be stored on-site, in approved storage units, during closure activities.

5.0 DECONTAMINATION

5.1 Performance Criteria

Surface wipe tests and monitoring will be conducted in Unit 26 to determine residual levels of radioactivity and hazardous constituents. Decontamination of Unit 26 will be performed if the tests show residuals in excess of the limits set forth in this section. The sampling and analysis protocols for the wipe tests are discussed in Section 6.

Two performance limits are set for radioactivity; direct and removable alpha activity. The respective performance limits are 1,000 disintegrations per minute (dpm) per 100 cm² and 20 dpm per 100 cm². These are standard decontamination levels used at the Rocky Flats Plant as presented in the "Radiation Monitoring Procedures Manual" (Rockwell International, 1989). The direct count will be obtained with an air proportional alpha survey instrument and the removable level will be obtained by counting filter paper surface smears with a scintillation instrument.

In regard to metals contamination, performance criteria are defined for those analytes stored in Unit 26 that are found in 40 CFR 264 Appendix IX, lead excepted due to its possible presence in the paint used to seal the surfaces of Unit 26. These analytes, or indicator parameters, are listed in Table 2 along with wipe test limits for contamination. The limits are based on the EPA Contract Laboratory Program (CLP) Required Quantitation Limits (RQLs) (EPA, 1987) when the sample smears are digested according to CLP soil/sediment sample preparation methods.

Surface wipe testing for the organic solvents stored in Unit 26 will not be conducted due to the lack of any known releases and because of the highly volatile characteristic of the compounds that would render them unlikely to be present in the event of a historical spill.

5.2 Decontamination of Room 266B

Decontamination of Room 266B will be conducted if initial surface wipe and monitoring tests show residual levels of radioactivity or indicator parameter concentration levels above the performance criteria discussed in Section 5.1. Removal of any hazardous waste residues remaining on the surfaces of Unit 26 will be accomplished with a wash and triple rinse. A solution of 0.5% EDTA, 0.25M citric acid, and 0.15M hydrazine in deionized

TABLE 2
INDICATOR PARAMETERS
AND CONTAMINATION LIMITS

<u>PARAMETER</u>	<u>CONTAMINATION LIMITS (ug/smear)</u>
Antimony	12
Arsenic	2
Barium	40
Beryllium	1
Cadmium	1
Chromium	2
Cobalt	10
Copper	5
Mercury	0.04
Nickel	8
Selenium	1
Silver	2
Thallium	2

water will be used in the wash. This solution is effective in removing non-oily mixed waste residues. The wash will be followed by the triple rinse procedure required by 40 CFR 261.7(b)(3) for decontamination of containers or container liners used to store hazardous materials. The rinse water used will be free of organics.

Up to 70 gallons of solution may be generated by one wash and triple rinse of Room 266B. This rinsate will be collected by a vacuum unit and placed in 55-gallon drums or tank truck. The rinsate will then be transferred to Building 374 for treatment.

Decontamination verification will be achieved by repeating the surface wipe and monitoring tests for residual alpha activity and hazardous constituent indicator parameters as described in Section 6.

5.3 Decontamination of Auxiliary Equipment

There is no identifiable auxiliary equipment which was used in the Unit 26 Drum Storage Area.

5.4 Decontamination of Equipment Used During Closure

The equipment used during Unit 26 decontamination activities, if any, will be decontaminated at a designated washdown area within the unit. This equipment may include, but is not limited to, a vacuum unit, wash applicator, tank truck, and drums. The wash solution described in Section 5.1 will be used followed by a triple rinse. Rinsate will be collected in approved containers and will be treated on-site at Building 374.

5.5 Contaminated Soils

Room 266B is located two floors above the sub-basement level, which rests on the ground. This location, together with the absence of any releases, eliminates consideration of soil contamination.

5.6 Removal of Hazardous Waste Residues

Approximately 70 gallons of waste may be generated by decontamination processes. The waste will be collected and placed in 55-gallon drums or a tank truck. The effluent contained in the drums or tank truck will be transferred to Building 374 for treatment.

6.0 SAMPLING AND ANALYTICAL METHODS

6.1 Sampling Procedures

Sampling for direct and removable radiation will be performed according to Rockwell standard sampling procedures. These procedures are outlined in the "Radiological Monitoring Procedure Manual" (Rockwell International, 1989). Total alpha activity levels of the unit will be measured with an air-proportional-type alpha survey meter at ten random locations within the unit. Surface smears will be taken at these ten locations for a measure of removable alpha activity.

Ten random surface smears, separate from those collected for removable alpha activity, will be obtained and analyzed for the indicator parameters listed in Table 2. A piece of filter paper, one inch in diameter, will be used to wipe a 10 cm x 10 cm area.

6.2 Analytical Methods

The procedures and limits that will be used in measuring alpha activity are described in the "Radiological Monitoring Procedures Manual" (Rockwell International, 1989). The contamination limits for direct and removable alpha activity are 1,000 disintegrations per minute (dpm) per 100 cm² and 20 dpm per 100 cm², respectively. These are standard decontamination levels used at the Rocky Flats Plant. The direct count will be obtained with an air proportional alpha survey instrument and the removable level will be obtained by counting filter paper surface smears with a scintillation instrument.

The surface smears, along with a sample of the blank filter paper, will be forwarded to an EPA Contract Laboratory for analysis. The smears will be prepared for analysis according to soil/sediment sample digestion procedures and total micrograms of each constituent will be determined by the appropriate method (EPA, 1987). The contamination limits for the inorganic indicator parameters are listed in Table 2.

7.0 CLOSURE SCHEDULE

The CDH and the EPA Regional Administrator will be notified of the intent to close Unit 26, 45 days prior to beginning the closure. Decontamination of the unit will be accomplished within 90 days from the beginning of closure. The decontamination of equipment will require 10 additional days. An additional 90 days will be required prior to receiving analytical results.

If the unit is shown to be sufficiently clean after one decontamination, closure will be certified 180 days after closure plan approval (Figure 3). If testing of the surface indicates contamination is still present above the performance standards, the closure schedule will be extended to allow additional time for further decontamination and analysis.

8.0 CLOSURE COST AND FINANCIAL ASSURANCE

State and Federal government facilities are exempt from the financial requirements imposed by Subpart H of 6 CCR 1007-3, Section 265.140(c). Because the Rocky Flats Plant is a federally-owned facility, no cost estimates or financial assurance documentation is required.

9.0 SITE ACCESS AND SECURITY

Access to the work area will be limited to authorized personnel only. Exit from the working area will be through a clean, restricted area in the decontamination area. Existing security measures at the Rocky Flats Plant meet the requirements of 6 CCR 1007-3, Section 265.14. These include:

- A three-strand barbed-wire cattle fence surrounding the facility posted to identify the land as a government reservation/restricted area,
- A fence and armed guards posted 24 hours daily at two gates to the controlled area of the facility, and
- Surveillance by security cameras 24 hours daily.

Existing fences and gates are operated and maintained by DOE. Maintenance requirements will be performed by DOE regardless of closure activities at the site.

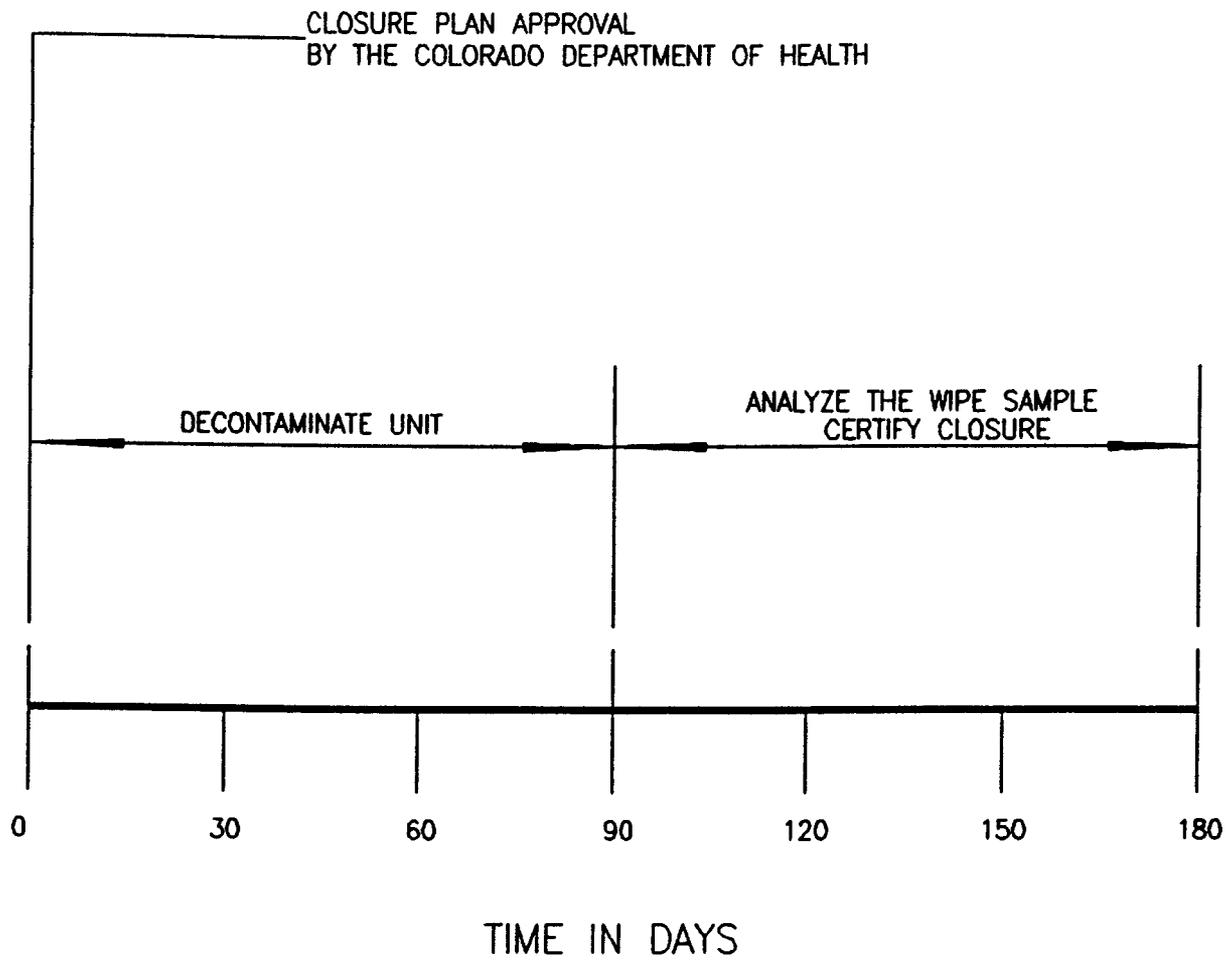


FIGURE 3
SCHEDULE OF CLOSURE ACTIVITIES
UNIT 26

10.0 HEALTH AND SAFETY

A site-specific Health and Safety Plan covering decontamination and closure of the site will be submitted to the CDH two months before closure activities begin. The plan will comply with all Occupational Safety and Health Administration (OSHA), CDH, EPA and DOE requirements.

11.0 POST-CLOSURE MONITORING

The implementation of unit-specific post-closure monitoring is not expected to be necessary due to the contained nature of the drum storage area.

12.0 CLOSURE CERTIFICATION

After completion of closure, the owner or operator and an independent certified registered engineer will submit certification of closure, based upon compliance with the closure plan, to the CDH and the EPA Regional Administrator.

The independent registered professional engineer will periodically review the closure operations in enough detail to assure final certification of closure. The final certification of closure will state that the closure procedures and standards have been carried out as described in the approved closure plan. In order to certify the performance and completion of closure activities, the independent registered professional engineer will review test results and inspect the site to verify the closure plan was carried out as approved. Both the operator and the independent registered professional engineer will submit a written document to the CDH and the EPA Regional Administrator to certify closure activities were conducted in accordance with the approved closure plan.

13.0 REFERENCES

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