

CORRES. CONTROL
OUTGOING LTR. NO.

DOE ORDER # 4700.1

03-RF-00213



DIST.	LTR	ENC.
DIETER, T.		
FERRERA, D.W.		
FERRI, M.S.		
LINDSAY, D.		
LYLE, J.		
MARTINEZ, L. A.		
PARKER, A.		
POWERS, K.		
SHELTON, D.C.	X	X
SPEARS, M.S.		
TRICE, K.D.		
TUOR, N. R.		

Rocky Flats Environmental Technology Site

MAR - 7 2003

03-RF-00213
03-DOE-00142

AGUILAR, P.		
ALBIN, C.		
AUBLE, M.		
BEAN, C.		
BUTLER, J. L.		
CERCLA AR (T130G)	X	X
CLARK, D.		
DIETERLE, S.		
FRANCIS, M.	X	X
FREIBOTH, C.		
GIBBS, F.		
GUTHRIE, V.		
HUMSTON, T.		
KEHLER, K.		
MARSCHALL, J.R.		
MARTIN, D.		
MYERS, K.		
NESTA, S.	X	X
NORTH, K.		
OLIVER, R.		
OMAN, K.		
PLAPPERT, R.		
PRIMROSE, A.	X	X
ROSENMAN, A.	X	X
SNYDER, D.P.		
THOMPSON, J.		
VANDERPOEL, M.		
WIEMELT, K.		
WILLIAMS, L.		
LINDSAY, T.	X	X
CORRES. CONTROL	X	X
ADMIN RECRD/T130G		
TRAFFIC		
PATS/130		

Mr. Joe Schieffelin
Permitting and Compliance Unit Leader
Federal Facilities Program
Hazardous Materials and Waste Management Division
Colorado Department of Public Health and the Environment
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

CLOSURE DESCRIPTION DOCUMENT FOR CLOSURE OF TREATMENT PROCESS 788.3 THE MIXED WASTE DEBRIS TREATMENT PROCESS AT THE PROTECTED AREA DECONTAMINATION PAD AND SUMP (B966) - SMN-011-03

Dear Mr. Schieffelin:

Pursuant to Part X of the Rocky Flats Environmental Technology Site's (RFETS) RCRA Part B permit, which addresses closure of permitted RCRA units in accordance with RCRA, Kaiser-Hill Company, L.L.C., and the United States Department of Energy, Rocky Flats Field Office (DOE, RFFO) are submitting this Closure Description Document for Closure of Treatment Process 788.3, the Mixed Waste Debris Treatment Process At The Protected Area Decontamination Pad And Sump (B966)

The Closure Description Document contains a description of the process to be closed, the selected method of closure, and the types of contamination to be addressed. We request approval of this Closure Description Document within 45 days of receipt.

If you have any questions, please contact Stephen Nesta of Kaiser-Hill Remediation, Industrial D&D, & Site Services (RISS) at 303-966-6386.

SM NESTA 2/11/03
Stephen Nesta Date
Environmental Manager
Remediation, Industrial D&D, & Site Services
Kaiser-Hill Company, LLC

Richard DiSalvo 2/27/03
Richard DiSalvo Date
Acting Assistant Manager
for Environment and Stewardship
U.S. Department of Energy

CLASSIFICATION:		
UCNI		
UNCLASSIFIED	X	X
CONFIDENTIAL		
SECRET		

Date: _____
IN REPLY TO RFP CC NO.: MPF:pvt

ACTION ITEM STATUS: Attachment:
 PARTIAL/OPEN As Stated
 CLOSED

LTR APPROVALS: cc:
ORIG. & TYPIST INITIALS: J. Hindman - CDPHE
MPF:pvt D. Kruchek - CDPHE
S. Tower - DOE, RFFO
S. MacLeod - DOE, RFFO



ADMIN RECORD
IA-A-001312

4/10/03

**Closure Description Document for the
Closure of Treatment Process 788.3
The Mixed Waste Debris Treatment Process at the
Protected Area Decontamination Pad and Sump (B966)**

U.S. Department of Energy
Rocky Flats Environmental Technology Site
EPA ID No. CO7890010526



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1.0 INTRODUCTION

1.1 Purpose and Scope

Part X of the Rocky Flats Environmental Technology Site's (RFETS) RCRA Part B Permit, addresses closure of permitted units. Removal of the unit is subject to the Closure Plan, as described in Part X, and to a subsequent Closure Description Document that identifies the portions or sections of the Closure Plan that are applicable to the specific permitted unit closure

This Closure Description Document applies only to the Unit 788.3 Mixed Waste Treatment Process which was conducted at the Protected Area (PA) Decontamination Pad (B966). The process will be closed by removal of its components and management of the material as waste.

1.2 Unit Closure Notification and Schedule

The Colorado Department of Public Health and Environment (CDPHE), Hazardous Materials and Waste Management Division is hereby notified of the Site's intent to conduct closure of the Mixed Waste Treatment Process by closing the system described in Section 4.0. The submittal of this notification is at least 45 days prior to the beginning of closure activities. Closure activities for the Mixed Waste Treatment Process are expected to commence after April 01, 2003 or once approval of this Closure Description Document is received. The identified closure activities are expected to be completed within 180 days. If closure activities cannot be completed within 180 days, a request for extension will be submitted to the Division at least 30 days prior to the end of the 180 days.

Within 30 days of completion of closure activities a summary report will be submitted to CDPHE.

1.3 Facility Contacts

The contacts for this closure activity at RFETS are:

Acting Assistant Manager
For Environment and Stewardship
Rocky Flats Field Office
U.S. Department of Energy
10808 Highway 93, Unit A
Golden, CO 80403-8200
(303) 966-4765

Environmental Manager
Remediation, Industrial
D&D, & Site Services
Kaiser-Hill Company L.L.C
10808 Highway 93, Unit B
Golden, CO 80403-8200
(303) 966-6386

2.0 METHOD OF CLOSURE AND PERFORMANCE STANDARD

The components of the treatment system described herein will be closed by removal and disposal as waste as provided for in the Closure Plan, Section X of the RCRA Part B Permit.

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3.0 SYSTEM DESCRIPTION AND WASTE CHARACTERIZATION

Part of the PA Decontamination Pad is included in the RFETS RCRA Part B Permit as the Unit 788.3 Mixed Waste Debris Treatment Process. The process is described as a system that includes the pad, sump, overspray curtains, shed and pressure washing equipment at B966. The permitted process involved pressure washing equipment on the pad and collecting the wash water from the sump in 55-gallon drums. Directly east of the pad is a separate containment area consisting of five 2000-gallon poly tanks. These tanks and the associated equipment were not part of the 788.3 process and will be handled separately as LLW. See Attachment 1 for a detailed drawing of the decontamination pad area.

The pad is constructed of concrete and painted with epoxy paint. The pad slopes to a trench located in the center of the pad. The trench is approximately 15 inches deep and covered with a metal grate. A four-inch concrete berm surrounds the pad and a collapsible vinyl curtain suspended on steel poles is included to catch overspray and contain the liquid to the area within the berm. Decontamination water collected in the trench was transferred to 55 gallon drums by a portable pump. The drums were transferred to Unit 374.3 (B374) for treatment.

The decontamination equipment consists of a high pressure-hot water washer. The pressure washer machine is contained in a small shed adjacent to the pad. The shed and machine were protected from contamination by the vinyl curtain and are not contaminated.

Historically, the Mixed Waste Treatment Process was used to decontaminate unusable equipment such as small boats, cement mixers and wheelbarrows. These items had been contaminated during use in/around the solar ponds and were considered waste. Treatment Unit 788.3 was established to treat the equipment by pressure washing so that the equipment could be re-characterized as municipal solid waste. The following table, Table 3-1, identifies the RCRA Waste Codes, the contaminants of concern, and LDR treatment levels associated with Unit 788.3.

Table 3-1

Associated RCRA Waste Codes, Contaminants of Concern & Action Levels.

RCRA Waste Code	Associated Contaminants of Concern	Non-wastewater Treatment Standard— mg/l TCLP, unless noted otherwise
D001	Ignitable	No longer meets RCRA characteristic.
D002	Corrosive	No longer meets RCRA characteristic.
D004	Arsenic	5.0.

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RCRA Waste Code	Associated Contaminants of Concern	Non-wastewater Treatment Standard— mg/l TCLP, unless noted otherwise
D005	Barium	21.0
D006	Cadmium	.11
D007	Chromium	.6
D008	Lead	.75
D009	Mercury	.25
D010	Selenium	5.7
D011	Silver	.14
D018	Benzene	10.0 mg/kg
D019	Carbon tetrachloride	6.0 mg/kg
D022	Chloroform	6.0 mg/kg
D028	1,2 Dichloroethane	6.0 mg/kg
D029	1,1 Dichloroethylene	6.0 mg/kg
D035	Methyl ethyl ketone	36 mg/kg
D038	Pyridine	16 mg/kg
D040	Trichloroethylene	6.0 mg/kg
D043	Vinyl chloride	6.0 mg/kg
F001	Listed spent halogenated solvents used in degreasing.	Standard varies with solvent.
F002	Listed spent halogenated solvents	Standard varies with solvent.
F003	Listed spent non-halogenated solvents	Standard varies with solvent.
F005	Listed spent non-halogenated solvents	Standard varies with solvent.
F006	Wastewater treatment sludges from electroplating operations.	Standard varies with constituent.

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RCRA Waste Code	Associated Contaminants of Concern	Non-wastewater Treatment Standard- mg/l TCLP, unless noted otherwise
F007	Spent Cyanide Plating Bath Solutions from electroplating operations	6.0 mg/kg
F009	Spent stripping and cleaning Bath Solutions from electroplating operations where cyanide is used	6.0 mg/kg
P Series	Discarded commercial products, off-specification species, container residues, and spill residues thereof	Standard varies with constituent.
U Series	Commercial chemical products, manufacturing chemical intermediates, or off-specification commercial chemical products	Standard varies with constituent

4.0 SPECIFIC CLOSURE ACTIVITIES

A sampling plan will be implemented that accurately determines if the concrete pad meets the LDR standards contained in 6CCR1007-3. The pad consists of two homogenous areas - the collection trench and the main pad area. Five concrete core samples, 2" deep and 2" diameter, will be collected and analyzed for TCLP metals and semi-volatile organic compounds. Because the pad is outside and fully exposed to the environment, volatile organic compounds (VOCs) are not expected to be present and VOC analysis was not performed. Two of the samples will be collected from the trench and three from the pad area. One of the trench samples will be biased to the low point of the sump. The analytical results will be compared with Table 3-1 to determine if the pad is either suitable for land disposal as a hazardous waste assigned the applicable D, F, P and U codes, or needs to be sent offsite for treatment. The pad and curtain system will also be scanned to determine if contamination by radioactive materials has occurred. Regardless of the disposal path, the process will be closed by removal of the Unit 788.3 components.

Activities will be designed to achieve the clean closure performance standards, protect human health and the environment, and minimize waste. An IWCP/engineering work package will be prepared for removal of the PA Decontamination Pad. The IWCP/engineering package will be used to control work, including specification of personal protective equipment, methods for

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preventing releases to the environment and waste packaging. The Site's Health and Safety Practices Manual will be followed.

A hydraulic hammer will be used to break up the concrete pad into pieces that meet packaging requirements. In addition to the concrete, the curtain and supporting poles will be appropriately sized and handled as hazardous waste. The shed, pressure washer, and any other component that was outside of the spray area will be scanned for radioactive contamination and handled appropriately.

5.0 DISPOSITION OF CLOSURE WASTES

Waste management, handling, transportation and disposal will comply with the requirements of the RCRA Part B permit, RFETS procedures, and other requirements. Solid wastes, such as the shed and pressure washing unit, that were not exposed to hazardous constituents and demonstrate no other hazardous or radiological characteristics, will be disposed of as construction debris or released for resale. The concrete pad, poles, and curtain will be managed as LDR compliant debris for landfill, or as non-LDR compliant debris for treatment depending on the analyses described in Section 4.0.

6.0 RECORDKEEPING

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:

- this Closure Description Document;
- IWCP work packages;
- analytical results;
- documentation that closure was conducted in accordance with the closure plan.

7.0 AMENDMENT OF THE CLOSURE DESCRIPTION DOCUMENT

In conducting closure activities, unexpected events that are identified during implementation of closure activities may require an amendment to this Closure Description Document. Modifications to this Closure Description Document will be made in accordance with applicable regulations.

8.0 REFERENCES

1. Rocky Flats Environmental Technology Site RCRA Permit, May 5, 1998
2. Rocky Flats Cleanup Agreement (RFCA), July 19, 1996.
3. Code of Colorado Regulations, Vol. 6, No. 1007-3

ATTACHMENT 1
Drawing of the PA Decontamination Pad Area

