

STATE OF COLORADO

Bill Owens, Governor
Douglas H. Benevento, Executive Director

Dedicated to protecting and improving the health and environment of the people of Colorado

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Located in Glendale, Colorado

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8100 Lowry Blvd.
Denver, Colorado 80230-6928
(303) 692-3080

<http://www.cdphe.state.co.us>



Colorado Department
of Public Health
and Environment

October 4, 2005

Mr. John J. Rampe
Director, Project Management Division
U.S. Department of Energy, Rocky Flats Project Office
12101 Airport Way, Unit A
Broomfield, Colorado 80021-2583

Mr. Stephen Nesta
Environmental Manager
Kaiser-Hill Company, RISS
Rocky Flats Environmental Technology Site
12101 Airport Way, Unit B
Broomfield, Colorado 80021-2583

RE: Acceptance, Closure Summary Reports (CSR) for Partial Closure of RCRA Unit 374.3 - 400 Area and Closure of RCRA Unit 374.3 - 700-800 Area Process Waste Transfer System

Dear Mr. Rampe and Mr. Nesta:

The Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division (the "Division") previously received the CSR for the 400 Area, dated June 26, 2003, and received an additional CSR for the 700-800 Area, dated August 23, 2005. The 400 Area report, a partial closure of Unit 374.3, has now been reviewed in conjunction with the 700-800 Area report. Both reported were found to be acceptable with the following notations.

The Division received a Closure Description Document (CDD) for the 400 Area, dated April 22, 2002, and granted conditional approval of the CDD on May 24, 2002. The Division also received a CDD for the 700-800 Area, dated January 23, 2003, and granted conditional approval of that CDD on June 13, 2003. The Division reviewed both CDDs, and the conditions of approval, to determine the acceptability of the CSRs.

The 700-800 Area CSR inadvertently included all of the 300-500 Area previously include in the 100-400 Area CSR. The greater portion of the 300-500 Area portion of the transfer system, inclusive of Valve Vaults (VV) 10 through 13, and associated piping from the 700-800 Area to Building 374, were incorporated into the 700-800 Area CDD. However, the lesser portion of the 300-500 Area transfer system, from VV 13 through VV14 into the 100-400 Area, were incorporated into the 100-400 Area CDD. While minor, the Division's acceptance of the CSRs is based on the partitioning of the transfer system as provided in the approved CDDs.

After reviewing the reports individually, the Division has determined that the conditions of approval have been met. For the 100-400 Area, noteworthy conditions were addressed as follows:

C:\Documents and Settings\Hainscou\My Documents\RFETS\Unit Closures-Closure pLan\CSR, Unit 374.3 (NPWL 400,700-800 Area) Acceptance.doc

ADMIN RECORD

IA-A-002986

1/25

Mr. Rampe & Mr. Nesta
Page 2 of 2
October 4, 2005

- Portions of primary lines that previously leaked, or leaked during contamination efforts, were removed along with their secondary lines rather than being clean-closed.
- Relative to beryllium, the line originating from Building 460 was removed. Analytical data included beryllium for clean closed lines along the route to B374.
- The Division accepts the PE certification for the closure of the waste transfer system as sufficient. DOE certification, as owner, for closure of the entire RCRA facility, currently in preparation and upon acceptance by the Division, is expected to meet the condition of the CDD approval.

The PE certification for the 100-400 Area states closure activities were conducted consistent with the approved CDD. However, planned actions by the Environmental Restoration Group to remove four sections of the transfer system were outstanding on the date of certification. Therefore, the Division accepts the certification as related to the clean closure of the portions of the transfer system left in place. Certification is not required for the portions that were removed and disposed as waste.

For the 700-800 Area, noteworthy conditions were addressed as follows:

- Portions of primary lines that previously leaked, or leaked during contamination efforts, were removed along with their secondary lines rather than being clean-closed.
- Analytical data supporting clean closure included hazardous waste constituents for the specified P and U hazardous waste codes as agreed in a contact record (S. Nesta to J. Hindman) dated April 7, 2003.
- The Division accepts the PE certification for the closure of the waste transfer system as sufficient. DOE certification, as owner, for closure of the entire RCRA facility, currently in preparation and upon acceptance by the Division, is expected to meet the condition of the CDD approval.

Figure 1 indicates that the line from Building 559 was not part of Unit 374.3 and was left in place. We agree that that portion of the transfer system line was not part of the system but was removed for practical reasons after specific RCRA closure activities had been completed. The line from Building 566 is correctly represented as non-RCRA and was left in place.

Lastly, discrepancies between Figure 1 and Attachment 2 of the 700-800 Area CDD were resolved. Figure 1 correctly excludes an OPWL line from B779 to B776. Further, it correctly shows lines originating in B881, becoming a single line in B887 and extending back through the west side of B881 to Valve Vault 1.

If you have any questions concerning this correspondence, please contact me at 303-692-3367 or Harlen Ainscough at (303) 692-3337.

Sincerely,



David A. Kruchek
Acting Rocky Flats Oversight Unit Leader

cc: M. Aguilar, USEPA Region VIII
D. Miller, AGO
Administrative Record, Mountain View

S. Garcia, City of Broomfield
David Ward, K-H Team

Sent certified mail 8/31/05

Revision 501

CORRES CONTROL
OUTGOING LTR #

DOE ORDER #

RF-00806



KAISER HILL
COMPANY

DIST LTR ENC

CROCKETT, G		
FERRERA, D.W.		
GILPIN, H.E.		
LONG, J.W.		
LINDSAY, D. C.		
SHELTON, D.C.		
TUOR, N.R.		
SNYDER, D		
MCGRORY, M		
HADACEK, M		
KAISER, M.		
BEAN, C.		
LINSINBIGLER, H		
NESTA, S.	X	X

Mr. David Kruchek
Acting 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

05-RF-00806

CLOSURE SUMMARY REPORT FOR OF RCRA UNIT 374.3 - 700-800 AREA PROCESS WASTE
TRANSFER SYSTEM - SMN-055-05

Dear Mr. Kruchek:

Pursuant to the Rocky Flats RCRA Part B Permit, Part X, Closure (June 1997), and the Closure Description Document for Partial Closure of Hazardous Waste Unit 374.3 - the 700-800 Area Process Waste Transfer System (03-RF-00038), Kaiser-Hill Company L.L.C. is submitting the attached Closure Summary Report for this portion of the unit in the 700-800 Area.

The summary report contains a description of the major closure activities and a declaration that the requirements of the Closure Description Document have been fulfilled. It should be noted that this summary report is the final document required, documenting closure actions for the RCRA Unit 374.3 process waste system (Closure Summary Report for Partial Closure of RCRA Unit 374.3 - 400 Area Process Waste Transfer System [03-RF-00967], submitted 6/26/03).

CORRES CONTROL	X	X
ATS		
DMN RECORD		
VASTE REC CTR		
RAFFIC		

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

CLASSIFICATION:

CNI		
NCLASSIFIED		
CONFIDENTIAL		
SECRET		

AUTHORIZED CLASSIFIER
SIGNATURE:

NA

Stephen M. Nesta
Environmental Manager, K-H RISS

Date

Stephen M. Nesta 8/23/05

Date:

IN REPLY TO RFP CC #: KLM:

Attachment:

As Stated

ACTION ITEM STATUS:

- PARTIAL/OPEN
- CLOSED

cc:

H. Ainscough - CDPHE
G. Morgan - RFFO

LTR APPROVALS:

(ast Name)
(ast Name)

ORIG. & TYPIST INITIALS:

KLM:rlm

SMN-055-05

Kaiser Hill Company, L.L.C.

Rocky Flats Environmental Technology Site, 10808 Hwy. 93 Unit B, Golden CO 80403-8200 ♦ 303-966-7000

Summary Report for Closure of RCRA Unit 374.3 -
The 700-800 Area Process Waste Transfer System

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

1.0 PURPOSE

This Summary Report pertains to RCRA closure activities for the 700-800 Area Process Waste Transfer System, part of RCRA Unit 374.3, and is a requirement of Section 1.2 of the Closure Description Document (CDD) for this RCRA Unit (03-RF-00038). It should be noted that the attached map shows a 300-500 area, which is considered part of the 700-800 area addressed in the above CDD. This report contains a description of major closure activities and any deviations from those stated in the CDD and other relevant information.

2.0 DESCRIPTION OF MAJOR CLOSURE ACTIVITIES

Closure activities were conducted under IWCP Work Packages:

- T0112205 • T0112373 • T0112455 • T0112537
- T0112538 • T0112539 • T0112544 • T0112693
- T0112694 • T0112695 • T0112760 • T0112792
- T0112878 • T0112879 • T0112960 • T0112961
- T0113000 • T0113001 • T0113002 • T0113042
- T0113127 • T0113152

Due to the majority of the lines, and some of the valve vaults not being able to achieve clean closure, the majority of the system was closed by removal.

The process waste lines that met clean closure had the openings sealed (grouted) at the points where they entered the valve vaults. All valve vault structures that met clean closure and those portions of the vaults that are more than four below current grade remain. See attached Contact Records that document consultation with CDPHE, concerning Valve Vaults 2, 3, 8, and 9.

All water generated during the closure activities was managed through the Aqueous Waste Treatment System.

Following is the weight of the LLMW that was generated during closure activities:

- 544.62 tons of waste

Following is the weight of the LLW that was generated during closure activities:

- 111.56 tons of waste

3.0 SUMMARY

The requirements stated in the CDD have been fulfilled. The attached map shows the complete RCRA 374.3 process waste transfer system and the status of the lines and valve vaults (Closure Summary Report for Partial Closure of RCRA Unit 374.3 – 400 Area Process Waste Transfer System [03-RF-00967], submitted 6/26/03).

CERTIFICATION

I certify that the closure activities for closure of RCRA Unit 374.3, 700-800 Area Process Waste Transfer System, were conducted consistent with the approved CDD (January 23, 2003, 03-RF-00038), and as stated above.


8/23/05



Timothy J. Humiston, PE# 26363

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE REGULATORY CONTACT RECORD

Date/Time: 11/18/04 - 1200

Site Contact(s): Karen Wiemelt
Phone: (303) 966-9883

Regulatory Contact: David Kruchek, CDPHE
Phone: (303) 692-3328

Agency: CDPHE

Purpose of Contact: Valve Vault 08 Demolition

Meeting Attendance: K. L. Wiemelt, KH David Kruchek, CDPHE

Discussion

On November 18, 2004, David Kruchek/CDPHE and Karen Wiemelt/KH discussed the disposition of Valve Vault (VV) 08. VV 08 is located to the west of Building 707. The vault's dimensions are 13' by 12' by 9'6" deep. There is also a sump that extends 4' below the bottom of the vault. Additionally, the final grade in this area will be approximately 3½ feet higher than current grade.

VV 08 was pressure washed to decontaminate it. Results show that this vault has been RCRA clean closed and has no removable Be contamination. The majority of the valve vault meets radiological unrestricted release criteria for both alpha and beta. However, there are a few elevated levels of alpha activity above the unrestricted release levels for fixed contamination in the sump of the valve vault and 2 NPWL stubs located in the lower 4 feet of the valve vault. The sump also has an elevated level of alpha activity slightly above the unrestricted release levels for removable contamination (32 dpm/100 cm² vs. 20 dpm/100 cm²).

Conservative calculations were done to determine the levels of radiological contamination that would be left in the ground if the valve vault were left in place. The estimated levels of remaining radiological material that would be left are as follows:

- 1.21 pCi/g Pu-239
- 0.27 pCi/g Pu-240
- 1.36 pCi/g Am-241
- 0.05 pCi/g U-234
- 0.05 pCi/g U-235
- 1.43 pCi/g U-238

The calculations show that the residual contamination left is well below Wildlife Refuge Worker Action Levels.

Based on the approach agreed to for VV 09, VV 08 will be flow-filled to the top of the valve vault. None of the valve vault will be removed since approximately 3½ feet of fill will be added to this area to achieve final configuration. The flow fill will be several feet higher than any level of contamination above the unrestricted release criteria. Associated NPWL outside the valve vault that have not been RCRA clean closed will be removed. However, the NPWL stubs that penetrate the valve vault wall with the elevated readings will remain in place. Additionally, the Closeout Report will include the estimated amount of transuranic material that is left in place.

Contact Record Prepared By: Karen Wiemelt

Required Distribution:

M. Aguilar, USEPA
S. Bell, DOE
R. Birk, DOE
C. Deck, KH
D. Foss, KH
S. Garcia, EPA
C. Gilbreath, KH
S. Gunderson, CDPHE

D. Kruchek, CDPHE
J. Legare, RFFO
R. Leitner, KH
J. Mead, KH
G. Morgan, DOE
S. Nesta, KH
K. North, KH
R. Schassburger, DOE
D. Shelton, KH

C. Zahm, KH

Additional Distribution:

H. Ainscough, CDPHE
C. J. Freiboth, KH
G. Carnival, KH
D. Parsons, KH

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE REGULATORY CONTACT RECORD

Date/Time: 08/10/04 – 1315

Site Contact(s): C. J. Freiboth (KH) – (CJF-077)
Phone: (303) 966-2823

Regulatory Contact: David Kruchek, CDPHE
Phone: (303) 692-3328

Agency: CDPHE

Purpose of Contact: Valve Vault 02 Demolition

Meeting Attendance:	C. J. Freiboth, KH PM	David Kruchek, CDPHE
	M. D. Flannery, KH	H. Linsinbigler, KH
	S. M. Nesta, KH	A. Cameron, KH

Discussion

On August 10, 2004, at 1315, a walkdown of Valve Vault (VV) 02 was conducted with the State (Kruchek). This vault has been RCRA clean closed, and demolition and removal of the entire vault was required because of residual fixed uranium contamination on the bottom walls of the vault and in the floor sump. The fixed levels on the walls are as high as 19,482 dpm/100 cm², and the sump has 45,000 dpm/100 cm² of fixed contamination. There is no removable radiological contamination in the vault.

Demolition activities on the vault were initiated, and included removal of the vault roof and portions of the walls. In order to remove the entire vault, a large excavation around the vault was initiated. The excavation on the outside of the vault continues to fill up with ground water (the water in the excavation has been pumped out three (3) times), due to the proximity of the vault to Building 883, where the footer drain system has been rendered inoperable. In addition, a retaining wall is located above the vault to the east, and in order to excavate around the vault for removal, an even larger excavation would be required. This large of an excavation would take out a significant portion of the retaining wall and could undermine much of the road next to Building 883. A significantly sized excavation creates additional safety concerns due to the sloping requirements. Based on the continued infusion of ground water into the excavation, and because of the size of the vault and required excavation, complete removal of the vault is very difficult.

A proposal was presented to the State (Kruchek), where the debris in the vault would be removed and the bottom portion of the vault would be flow-filled to ensure the fixed contamination is locked in place. Once this has been completed the vault would be removed to the flow-fill, ensuring the two (2) pipe penetrations from the lines from VV-1 are removed, as well as the two (2) lines from Building 883. The excavation around the vault that is filled with water would be pumped one more time and then backfilled.

Contact Record 08/10/04

The State (Kruchek) concurred with the approach that was presented.

Contact Record Prepared By: C. J. Freiboth

Required Distribution:

M. Aguilar, USEPA
S. Bell, DOE
R. Birk, DOE
C. Deck, KH
D. Foss, KH
S. Garcia, EPA
C. Gilbreath, KH
S. Gunderson, CDPHE

D. Kruchek, CDPHE
J. Legare, RFFO
R. Leitner, KH
J. Mead, KH
G. Morgan, DOE
S. Nesta, KH
K. North, KH
R. Schassburger, DOE
D. Shelton, KH

C. Zahm, KH

Additional Distribution:

H. Ainscough, CDPHE
A. Cameron, KH
C. J. Freiboth, KH
M. D. Flannery, KH
H. Linsinbigler, KH

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE REGULATORY CONTACT RECORD

Date/Time: 12/08/04 - 1400
Site Contact(s): Karen Wiemelt
Phone: (303) 966-9883
Regulatory Contact: David Kruchek, CDPHE
Phone: (303) 692-3328
Agency: CDPHE

Purpose of Contact: Valve Vault 03 Demolition

Meeting Attendance: K. L. Wiemelt, KH David Kruchek, CDPHE

Discussion

On December 8, 2004, David Kruchek/CDPHE and Karen Wiemelt/KH discussed the disposition of Valve Vault (VV) 03. VV 03 is located to the northwest of Building 883. The vault's dimensions are 9'9" by 9'9" by 13'6" deep. There is also a sump that extends 4' below the bottom of the vault. Current grade is representative of final grade for this area.

VV 03 was pressure washed to decontaminate it. Results show that this vault has been RCRA clean closed and has no removable Be contamination. The majority of the valve vault meets radiological unrestricted release criteria for both alpha and beta. However, there are a few elevated levels of alpha and beta activity above the unrestricted release levels for fixed contamination in the bottom 6 feet of the valve vault and the sump. All removable levels are below the unrestricted release levels.

Conservative calculations were done to determine the levels of radiological contamination that would be left in the ground if the valve vault were left in place. The estimated levels of remaining radiological material that would be left are as follows:

- 0.71 pCi/g Pu-239
- 0.16 pCi/g Pu-240
- 0.80 pCi/g Am-241
- 0.03 pCi/g U-234
- 0.12 pCi/g U-235
- 3.45 pCi/g U-238

The calculations show that the residual contamination left is well below Wildlife Refuge Worker Action Levels.

Based on the approach agreed to for VV 09, VV 03 will be back-filled to the top of the valve vault. Six feet of the top of the valve vault has already been removed. Debris from this removal

that is in the bottom of the valve vault will be removed to the extent practicable. Since removable levels meet the unrestricted release levels, the valve vault will be backfilled with dirt. Associated NPWL outside the valve vault that have not been RCRA clean closed will be removed. Additionally, the Closeout Report will include the estimated amount of transuranic material that is left in place.

Contact Record Prepared By: Karen Wiemelt

Required Distribution:

M. Aguilar, USEPA
S. Bell, DOE
R. Birk, DOE
C. Deck, KH
D. Foss, KH
S. Garcia, EPA
C. Gilbreath, KH
S. Gunderson, CDPHE

D. Kruczek, CDPHE
J. Legare, RFFO
R. Leitner, KH
J. Mead, KH
G. Morgan, DOE
S. Nesta, KH
K. North, KH
R. Schassburger, DOE
D. Shelton, KH

C. Zahm, KH

Additional Distribution:

H. Ainscough, CDPHE
C. J. Freiboth, KH
G. Carnival, KH
D. Parsons, KH

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE REGULATORY CONTACT RECORD

Date/Time: 10/27/04 - 1000
Site Contact(s): Karen Wiemelt
Phone: (303) 966-9883
Regulatory Contact: David Kruchek, CDPHE
Phone: (303) 692-3328
Agency: CDPHE

Purpose of Contact: Valve Vault 09 Demolition

Meeting Attendance: C. J. Freiboth, KH PM David Kruchek, CDPHE
K. L. Wiemelt, KH D. Parsons, D&DSC

Discussion

On October 27, 2004, at 1000, a meeting regarding Valve Vault (VV) 09 was conducted with the State (Kruchek). VV 09 is located at the northwest corner of Building 707. The vault's dimensions are 8' by 12' by 11'8" deep. There is also a sump below the bottom of the vault. Additionally, the final grade in this area will be approximately 5 feet higher than current grade.

VV 09 was pressure washed to decontaminate it. Results show that this vault has been RCRA clean closed and has no removable Be contamination. The majority of the valve vault meets radiological unrestricted release criteria for both alpha and beta. However, there are a few elevated levels of alpha activity above the unrestricted release levels for both removable and fixed contamination in the lower 4 feet and sump of the valve vault

Conservative calculations were done to determine the levels of radiological contamination that would be left in the ground if the valve vault were left in place. The estimated levels of remaining radiological material that would be left is as follows:

- 1.47 pCi/g Pu-239
- 0.33 pCi/g Pu-240
- 1.65 pCi/g Am-241
- 0.06 pCi/g U-234
- 0.05 pCi/g U-235
- 1.45 pCi/g U-238

The calculations show that the residual contamination left is well below Wildlife Refuge Worker Action Levels.

A proposal was presented to the State (Kruchek) where the vault would be removed to four feet below final grade and the remainder of the valve vault would be flow-filled to ensure the fixed

contamination is locked in place. Associated NPWL that have not been RCRA clean closed will still be removed. It was also proposed to apply this process to other valve vaults that are RCRA clean-closed but have some contamination above the unrestricted release criteria.

The State (Kruchek) concurred with the approach that was presented and also requested that flow fill be added to a minimum of one foot above the highest (in elevation) level of contamination above the unrestricted release criteria. The State also requested that the removable contamination be fixed prior to flow filling the vault. Site representatives agreed to these items (Freiboth, Parsons, Wiemelt). Results for each valve vault that is a candidate for this approach will be presented and documented in a Contact Record. Additionally, the Closeout Report will also include the estimated amount of transuranic material that is left in place.

Contact Record Prepared By: Karen Wiemelt

Required Distribution:

M. Aguilar, USEPA
S. Bell, DOE
R. Birk, DOE
C. Deck, KH
D. Foss, KH
S. Garcia, EPA
C. Gilbreath, KH
S. Gunderson, CDPHE

D. Kruchek, CDPHE

J. Legare, RFFO

R. Leitner, KH

J. Mead, KH

G. Morgan, DOE

S. Nesta, KH

K. North, KH

R. Schassburger, DOE

D. Shelton, KH

C. Zahm, KH

Additional Distribution:

H. Ainscough, CDPHE

A. Cameron, KH

C. J. Freiboth, KH

G. Carnival, KH

D. Parsons, KH

RECEIVED

2003 JUN 23 P 1:4

STATE OF COLORADO

COMMES. CONTROL
INCOMING LTR NO.

20571 RFO3

Bill Owens, Governor
Douglas H. Benevento, Executive Director

CORRESPONDENCE
CONTROL

Dedicated to protecting and improving the health and environment of the people of Colorado

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TDD Line (303) 691-7700 (303) 692-3090
Located in Glendale, Colorado

http://www.cdphe.state.co.us



Colorado Department
of Public Health
and Environment

DUE DATE
ACTION

DIST.	LTR	ENC
ERARDINI, J. H.	X	
OGNAR, E. S.	X	
ROCKETT, G. A.		
ECK, C. A.	X	
EGENHART, K. R.		
ETER, T. J.		
ETERLE, S. E.		
ERBERA, D. W.	X	
ERPL, M. S.		
ERMAIN, A. L.		
ACCOMINI, J. J.		
OM, J. H.		
NDAY, D. C.		
NG, J. W.		
LE, J. L.		
ARTINEZ, I. A.	X	
AGEL, R. E.	X	
ATH, K.	X	
ARKER, A. M.		
WERS, K. P.		
OGERS, A. D.		
ELT, G.	X	
EA		
ORL		
ILLIAMS, J. L.		

June 13, 2003

Mr. Richard DiSalvo, Acting Assistant Manager
Environment and Stewardship
U.S. Department of Energy, RFFO
10808 Highway 93, Unit A
Golden, CO 80403-8200

Mr. Stephen Nesta, Environmental Manager
Remediation, Industrial D&D, & Site Services
Kaiser-Hill Company, L.L.C.
Rocky Flats Environmental Technology Site
10808 Highway 93, Unit B, Building 116
Golden, CO 80403-8200

RE: Conditional Approval of Closure Description Document (CDD) for Partial Closure of RCRA Unit 374.3 - the 700 and 800 Area Process Waste Transfer System at the Rocky Flats Environmental Technology Site (RFETS)

Dear Mr. DiSalvo and Mr. Nesta:

The Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division (the "Division") has received your notice of intent to partially close RCRA Unit 374.3 and has reviewed the Closure Description Document (CDD) for the Partial Closure of Unit 374.3 - the 700 and 800 Area Process Waste Transfer System. The Division received this CDD from DOE and Kaiser-Hill on January 28, 2003 with a cover letter dated January 23, 2003. This CDD applies to portions of Unit 374.3 known as the "700 and 800 Area Process Waste Transfer System" which includes valve vaults 1 through 13 and the associated process waste lines connecting these valve vaults and the process waste lines between these valve vaults to the associated building boundaries.

The components of the RCRA unit described by this CDD will be closed by the method described as "Clean Closure by Decontamination" in Section X (Closure Plan) of the RFETS RCRA Permit No. CO-97-05-30-01. In accordance with Permit Condition X.B.3 of the RFETS RCRA Permit No. CO-97-05-30-01, the Division hereby approves this CDD for the portions of Unit 374.3 known as the "700 and 800 Area Process Waste Transfer System" as described therein, with the following conditions:

1. The schedule for the closure activities associated with the 700 Area Process Waste Transfer System must be provided to the Division prior to conducting closure activities on this portion of Unit 374.3.
2. Prior to conducting decontamination activities on any portion of double-walled piping within the 700 and 800 Area Process Waste Transfer System, the respective pipeline must be evaluated to determine if there have been any known releases from the primary pipeline (i.e., inner pipeline) to the secondary containment pipeline (i.e., outer pipeline) by reviewing documentation and any other known sources of

CONTROL	X
MIN. RECORD	X
TS/130	

Reviewed for Addressee
Corres. Control RFP

1/23/03 By

Ltr. #
EC .#
5400.1

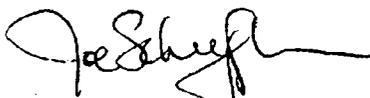
June 13, 2003

such information for the unit. If this evaluation reveals that a release has occurred, then the Division must be notified prior to conducting the work and information must be provided to the Division describing how closure activities will proceed for that portion of the system. If the evaluation determines that no known releases have occurred from the primary pipeline, then closure activities may proceed. However, for each portion of piping being decontaminated, the leak detection system must be visually monitored to determine if the primary pipeline is leaking. If leaks from the primary pipeline are detected, then decontamination activities must stop for that portion of the system and the Division must be notified and provided with plans describing how closure activities will proceed for that portion of the system. Unless otherwise directed by the Division, decontamination activities may recommence within two working days of providing the notification and plans to the Division.

3. As stated in an RFETS Regulatory Contact Record dated April 7, 2003 from Steve Nesta of Kaiser-Hill to James Hindman of the Division, the following hazardous waste constituents will need to be included in the list of analytes for which final rinsate will be tested to verify clean closure: cyanides (associated with hazardous waste codes P030, P098, P099, P106), acetonitrile (hazardous waste code U003), dimethyl sulfate (hazardous waste code U103), and 1,4-dioxane (hazardous waste code U108).
4. Since this CDD does not include a soil contamination evaluation for the 700 and 800 Area Process Waste Transfer System, it is assumed that soils and possibly groundwater in the vicinity of the unit will be evaluated by ER. Otherwise, the CDD will need to be amended to include a soil contamination evaluation.
5. In order for the Division to accept the complete or partial closure of any unit or portion thereof that remains after closure, a certification of closure must be submitted to the Division. The certification of closure will need to be signed by the facility and by an independent Colorado registered professional engineer (P.E.) in accordance with the requirements of the approved Closure Plan and Section 264.115 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3). The certification of closure may be submitted for either a partial closure of a unit or when an entire unit has been completely closed. Regardless of when the certification of closure is prepared and submitted, it is expected that the certifying P.E. will be involved in the closure process to the extent necessary to adequately certify closure.

If you have any questions concerning these matters, please contact James Hindman at (303) 692-3345.

Sincerely,



Joe Schieffelin, Unit Leader
Hazardous Waste Compliance Unit

cc: D. Maxwell, DOE-RFFO
S. Tower, DOE-RFFO
A. Rosenman, Kaiser-Hill
D. Shelton, Kaiser-Hill
T. Rehder, USEPA Region VIII
S. Garcia, City of Broomfield
D. Miller, AGO
S. Gunderson, CDPHE-HMWMD
D. Kruchek, CDPHE-HMWMD
S. Tarlton, CDPHE-HMWMD
Administrative Record, RFETS Bldg. T-130G

STATE OF COLORADO

Bill Owens, Governor
Douglas H. Benevento, Executive Director

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Colorado Department
of Public Health
and Environment

October 4, 2005

Mr. John J. Rampe
Director, Project Management Division
U.S. Department of Energy, Rocky Flats Project Office
12101 Airport Way, Unit A
Broomfield, Colorado 80021-2583

Mr. Stephen Nesta
Environmental Manager
Kaiser-Hill Company, RISS
Rocky Flats Environmental Technology Site
12101 Airport Way, Unit B
Broomfield, Colorado 80021-2583

**RE: Acceptance, Closure Summary Reports (CSR) for Partial Closure of RCRA Unit 374.3 - 400 Area
and Closure of RCRA Unit 374.3 - 700-800 Area Process Waste Transfer System**

Dear Mr. Rampe and Mr. Nesta:

The Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division (the "Division") previously received the CSR for the 400 Area, dated June 26, 2003, and received an additional CSR for the 700-800 Area, dated August 23, 2005. The 400 Area report, a partial closure of Unit 374.3, has now been reviewed in conjunction with the 700-800 Area report. Both reported were found to be acceptable with the following notations.

The Division received a Closure Description Document (CDD) for the 400 Area, dated April 22, 2002, and granted conditional approval of the CDD on May 24, 2002. The Division also received a CDD for the 700-800 Area, dated January 23, 2003, and granted conditional approval of that CDD on June 13, 2003. The Division reviewed both CDDs, and the conditions of approval, to determine the acceptability of the CSRs.

The 700-800 Area CSR inadvertently included all of the 300-500 Area previously include in the 100-400 Area CSR. The greater portion of the 300-500 Area portion of the transfer system, inclusive of Valve Vaults (VV) 10 through 13, and associated piping from the 700-800 Area to Building 374, were incorporated into the 700-800 Area CDD. However, the lesser portion of the 300-500 Area transfer system, from VV 13 through VV14 into the 100-400 Area, were incorporated into the 100-400 Area CDD. While minor, the Division's acceptance of the CSRs is based on the partitioning of the transfer system as provided in the approved CDDs.

After reviewing the reports individually, the Division has determined that the conditions of approval have been met. For the 100-400 Area, noteworthy conditions were addressed as follows:

C:\Documents and Settings\Hainscou\My Documents\RFETS\Unit Closures-Closure pLan\CSR, Unit 374.3 (NPWL 400,700-800 Area) Acceptance.doc

Mr. Rampe & Mr. Nesta

Page 2 of 2

October 4, 2005

- Portions of primary lines that previously leaked, or leaked during contamination efforts, were removed along with their secondary lines rather than being clean-closed.
- Relative to beryllium, the line originating from Building 460 was removed. Analytical data included beryllium for clean closed lines along the route to B374.
- The Division accepts the PE certification for the closure of the waste transfer system as sufficient. DOE certification, as owner, for closure of the entire RCRA facility, currently in preparation and upon acceptance by the Division, is expected to meet the condition of the CDD approval.

The PE certification for the 100-400 Area states closure activities were conducted consistent with the approved CDD. However, planned actions by the Environmental Restoration Group to remove four sections of the transfer system were outstanding on the date of certification. Therefore, the Division accepts the certification as related to the clean closure of the portions of the transfer system left in place. Certification is not required for the portions that were removed and disposed as waste.

For the 700-800 Area, noteworthy conditions were addressed as follows:

- Portions of primary lines that previously leaked, or leaked during contamination efforts, were removed along with their secondary lines rather than being clean-closed.
- Analytical data supporting clean closure included hazardous waste constituents for the specified P and U hazardous waste codes as agreed in a contact record (S. Nesta to J. Hindman) dated April 7, 2003.
- The Division accepts the PE certification for the closure of the waste transfer system as sufficient. DOE certification, as owner, for closure of the entire RCRA facility, currently in preparation and upon acceptance by the Division, is expected to meet the condition of the CDD approval.

Figure 1 indicates that the line from Building 559 was not part of Unit 374.3 and was left in place. We agree that that portion of the transfer system line was not part of the system but was removed for practical reasons after specific RCRA closure activities had been completed. The line from Building 566 is correctly represented as non-RCRA and was left in place.

Lastly, discrepancies between Figure 1 and Attachment 2 of the 700-800 Area CDD were resolved. Figure 1 correctly excludes an OPWL line from B779 to B776. Further, it correctly shows lines originating in B881, becoming a single line in B887 and extending back through the west side of B881 to Valve Vault 1.

If you have any questions concerning this correspondence, please contact me at 303-692-3367 or Harlen Ainscough at (303) 692-3337.

Sincerely,



David A. Kruczek
Acting Rocky Flats Oversight Unit Leader

cc: M. Aguilar, USEPA Region VIII
D. Miller, AGO
Administrative Record, Mountain View

S. Garcia, City of Broomfield
David Ward, K-H Team



June 26, 2003

03-RF-00967

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 SUMMARY REPORT FOR PARTIAL CLOSURE OF RCRA UNIT 374.3 - 400 AREA
PROCESS WASTE TRANSFER SYSTEM - SMN-031-03

Dear Mr. Schieffelin:

Pursuant to the *Rocky Flats RCRA Part B Permit, Part X, Closure (June 1997)*, and the *Closure Description Document for Partial Closure of Hazardous Waste Unit 374.3 - the 400 Area Process Waste Transfer System (02-RF-00783)*, Kaiser-Hill Company L.L.C. is submitting the attached Closure Summary Report for this portion of the unit in the 400 Area.

The summary report contains a description of the major closure activities and a declaration that the requirements of the Closure Description Documents have been fulfilled. Additionally, this document serves as the Closeout Report for the Type 1 facility 428 that was demolished in association with the closure of the 400 area valve vaults.

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

 6/27/03
Stephen M. Nesta Date
Environmental Manager, K-H RISS

KLM:pvt

Attachment:
As Stated

cc:

J. Hindman - CDPHE
D. Kruchek - CDPHE
R. DiSalvo - RFFO

Summary Report for Partial Closure of RCRA Unit 374.3 -
The 400 Area Process Waste Transfer System

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

1.0 PURPOSE

This Summary Report pertains to partial RCRA closure activities for the 400 Area Process Waste Transfer System, part of RCRA Unit 374.3, and is a requirement of Section 1.2 of the Closure Description Document (CDD) for this RCRA Unit (02-RF-00783). This report contains a description of major closure activities and any deviations from those stated in the CDD and other relevant information.

2.0 DESCRIPTION OF MAJOR CLOSURE ACTIVITIES

Closure activities were conducted under IWCP Work Packages TO108157, TO109927, TO109571, and TO110360. There were no unanticipated circumstances or events to cause a deviation from the descriptions in the CDD.

All but the following process waste lines were cleaned in accordance with the Closure Description Document and met the clean closure standard. The lines that were not cleaned are the following:

- The line from B460 to Valve Vault (VV) 18 is suspected to have leaked so it was not jetted or sampled.
- The line from B122 to VV18 was too long with too many elbows for the jetting process.
- The line from B123 to VV18 was partially removed during the environmental restoration B123 slab removal project. Approximately 20 feet of line still remains attached to VV18.
- The aboveground line from B444 to VV19 has too many elbows for the jetting process.

These will be left in place and will be removed when the Environmental Restoration group remediates the area. RSOP notification will be submitted under the ER RSOP for these areas. The process waste lines that met clean closure had the openings sealed or capped at the points where they entered the valve vaults. All valve vault structures met clean closure and those portions of the vaults that are more than four below current grade remain.

All water generated during the closure activities was managed through the Aqueous Waste Treatment System. The total volume was 1800 gallons.

Following are the number of containers and weights of the LLMW that was generated during closure activities:

- 10 IP2 crates with a total volume of 1060 cubic feet of waste
- 11 IP1 crates with a total volume of 990 cubic feet of waste.

It should be noted that for the valve vaults the top four feet of concrete, the associated sheds, and Building 428 were released under a PRE and disposed of as sanitary waste. This miscellaneous building/valve vault material, such as

sheet metal and concrete, equaling 50 cubic yards or 7.29 tons of sanitary waste was removed.

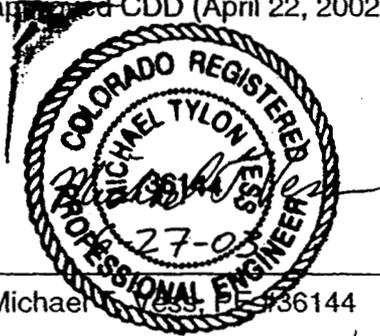
The only utility associated with Building 428 was electrical that the project disconnected from the facility at the utility pole approximately 50 west of the building.

3.0 SUMMARY

The requirements for clean closure of the process waste lines and valve vaults, as stated in the CDD, except as identified above, have been fulfilled.

4.0 CERTIFICATION

I certify that the closure activities for partial closure of RCRA Unit 374.3, 400 Area Process Waste Transfer System, were conducted consistent with the approved CDD (April 22, 2002, 02-RF-00783) as stated above.



Michael Tylon, PE 36144

STATE OF COLORADO

Bill Owens, Governor
Jane E. Norton, Executive Director

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Colorado Department
of Public Health
and Environment

May 24, 2002

Joseph A. Legare, Assistant Manager
Environment & Stewardship
U.S. Department of Energy, RFFO
10808 Highway 93, Unit A
Golden, Colorado 80403-8200

Stephen Nesta, Environmental Manager
Remediation, Industrial D&D, & Site Services
Kaiser-Hill Company, L.L.C.
10808 Highway 93, Unit B, Building 116
Golden, Colorado 80403-8200

RE: Conditional Approval of Closure Description Document (CDD) for Partial Closure of RCRA Unit 374.3 – the 400 Area Process Waste Transfer System at the Rocky Flats Environmental Technology Site (RFETS)

Dear Mr. Nesta and Mr. Legare:

The Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division (the "Division") has received your notice of intent to partially close RCRA Unit 374.3 and has reviewed the *Closure Description Document (CDD) for the Partial Closure of Unit 374.3 – the 400 Area Process Waste Transfer System*. The Division received this CDD from DOE and Kaiser-Hill on or about April 24, 2002 with a cover letter dated April 22, 2002. This CDD applies to a portion of Unit 374.3 known as the "400 Area Process Waste Transfer System" which includes the process waste line connecting valve vault 13 to valve vault 14, valve vaults 14 through 20, all process waste lines between valve vaults 14 through 20, and all process waste lines originating from Buildings 122, 428, 443, 444, 447, and 460. Building 428 itself and Tank D-853 located within are not included within the scope of this CDD as stated in an e-mail message dated April 8, 2002 from Todd Billmire of Kaiser-Hill's RISS Project.

On or about March 22, 2002, the Division received from RFETS a draft Notification #02-06 to invoke the *Environmental Restoration RFCA Standard Operating Protocol for Routine Soil Remediation at HSS Group 400-7* ("ER RSOP Notification #02-06"). ER RSOP Notification #02-06 also describes closure activities that are planned for the 400 Area Process Waste Transfer System. However, neither the CDD nor the ER RSOP Notification described how these overlapping closure activities related to

each other. On May 22, 2002 the Division received an e-mail message from Alec Cameron of Kaiser-Hill's RISS Project clarifying the relation between these two documents for activities planned for the 400 Area Process Waste Transfer System. According to the May 22, 2002 e-mail message, the decontamination activities described in the CDD for the 400 Area Process Waste Transfer System will be attempted first. If the decontamination method does not meet the closure performance standard or if the method is determined to not be economically feasible, then the system will be closed by the Environmental Restoration (ER) Project in accordance with the activities described under ER RSOP Notification #02-06.

The components of the RCRA unit described by this CDD will be closed by the method described as "Clean Closure by Decontamination" in Section X (Closure Plan) of the RFETS RCRA Permit No. CO-97-05-30-01. In accordance with Permit Condition X.B.3 of the RFETS RCRA Permit No. CO-97-05-30-01, the Division hereby approves this CDD for the portion of Unit 374.3 known as the "400 Area Process Waste Transfer System" as described therein, with the following conditions:

1. Prior to conducting decontamination activities on any portion of double-walled piping within the 400 Area Process Waste Transfer System, the respective pipeline must be evaluated to determine if there have been any known releases from the primary pipeline (i.e., inner pipeline) to the secondary containment pipeline (i.e., outer pipeline) by reviewing documentation and any other known sources of such information for the unit. If this evaluation reveals that a release has occurred, then the Division must be notified prior to conducting the work and information must be provided to the Division describing how closure activities will proceed for that portion of the system. If the evaluation determines that no known releases have occurred from the primary pipeline, then closure activities may proceed. However, for each portion of piping being decontaminated, the leak detection system must be visually monitored to determine if the primary pipeline is leaking. If leaks from the primary pipeline are detected, then decontamination activities must stop for that portion of the system and the Division must be notified and provided with plans describing how closure activities will proceed for that portion of the system. Unless otherwise directed by the Division, decontamination activities may recommence within two working days of providing the notification and plans to the Division.
2. Since this CDD does not include a soil contamination evaluation for the 400 Area Process Waste Transfer System, it is assumed that soils and possibly groundwater in the vicinity of the unit will be evaluated by ER. Otherwise, the CDD will need to be amended to include a soil contamination evaluation.
3. Although not required for a RCRA closure, it is assumed that additional parameters (e.g., radiological contaminants, beryllium) will be evaluated in order to determine whether or not there are other contamination issues per the Rocky Flats Cleanup Agreement (RFCA). It is expected that such an evaluation will occur in accordance with the consultative process described in RFCA.
4. In order for the Division to accept the complete or partial closure of any unit or portion thereof that remains after closure, a certification of closure must be submitted to the Division. The certification of closure will need to be signed by the facility and by an independent Colorado

registered professional engineer (P.E.) in accordance with the requirements of the approved Closure Plan and Section 264.115 of the Colorado Hazardous Waste Regulations (6 CCR 1007-3). The certification of closure may be submitted for either a partial closure of a unit or when an entire unit has been completely closed. Regardless of when the certification of closure is prepared and submitted, it is expected that the certifying P.E. will be involved in the closure process to the extent necessary to adequately certify closure.

If you have any questions concerning these matters, please contact James Hindman at (303) 692-3345.

Sincerely,



Joe Schieffelin, Unit Leader
Hazardous Waste Compliance Unit

cc: S. MacLeod, DOE-RFFO
S. Tower, DOE-RFFO
D. Shelton, Kaiser-Hill
M. Aguilar, USEPA Region VIII
T. Rehder, USEPA Region VIII
D. Miller, AGO
S. Gunderson, CDPHE-HMWMD
D. Kruchek, CDPHE-HMWMD
S. Tarlton, CDPHE-HMWMD
Administrative Record, RFETS Bldg. T-130G

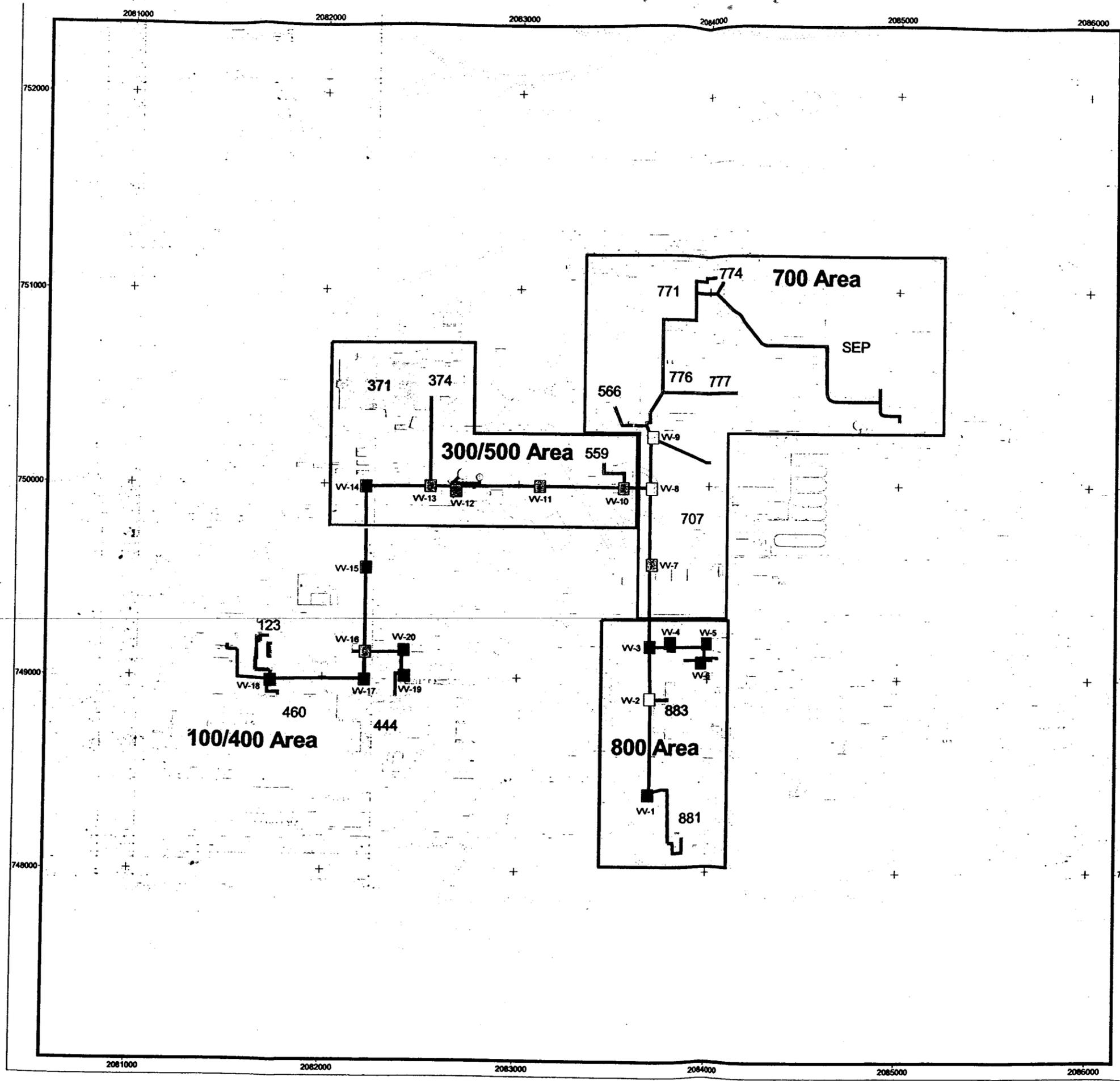


Figure 1
IHSS Group 000-4
New Process Waste Lines
(NPWL)
and Valve Vault
Locations

KEY

- NPWL - removed (below ground)
- NPWL - removed (above ground)
- NPWL - left in place (clean closed)
- NPWL - left in place (not part of RCRA Unit 374.3)
- Valve Vault - removed
- Valve Vault - partially removed and flow filled
- Valve Vault - partially removed and backfilled
- Building/structure
- Demolished structure
- Paved area
- Dirt road

Note: Valve vaults are greatly enlarged from actual scale for readability purposes

DRAFT

Scale = 1:4,000
 State Plane Coordinate Projection
 Colorado Central Zone
 Datum: NAD 27

U.S. Department of Energy
 Rocky Flats Environmental Technology Site

Prepared by: Date: August 2005

Prepared for:

File: W:\Projects\Fy2005\000-4\NPWL.cor gpp.apr

25/25