

CORRES CONTROL
OUTGOING LTR #

DOE ORDER #
05-RF-00980



DIST	LTR	ENC
CROCKETT, G		
FERRERA, D.W.	X	X
GILPIN, H.E.		
LONG, J.W.		
LINDSAY, D.C.		
SHELTON, D.C.		
TUOR, N.R.		
SNYDER, D		
PLAPPERT, R. D.		
GILLESPIE, D. R.		
NESTA, S.	X	X

October 26, 2005

05-RF-00980

Richard J. Schassburger, Director
Headquarters Cadre Project Management
DOE, RFPO

TRANSMITTAL OF REVISION 1 OF DECOMMISSIONING CLOSEOUT REPORT FOR THE
371/374 CLOSURE PROJECT AND RESPONSE TO COLORADO DEPARTMENT OF PUBLIC
HEALTH AND ENVIRONMENT (CDPHE) COMMENTS – DWF-106-05

Enclosed are the responses to CDPHE comments on the Final Decommissioning Closeout
Report for the 371/374 Closure Project, Type 3 Facility. Also enclosed is a Revision 1 to the
Final Decommissioning Closeout Report for the 371/374 Closure Project.

This response to comment incorporates new text to the document which is why the entire text of
the document was revised. For completeness Revision 1 is a stand alone document which has
reproduced Revision 0 attachments in black and white and new additions in color, as
appropriate.

The report is submitted to document completion of Deactivation and Decommissioning activities
for the 371/374 Building complex. Transmittal to the CDPHE and the Environmental Protection
Agency, in accordance with the Rocky Flats Clean-Up Agreement, is requested. Also, please
submit a color copy of Figures 1 & 2 to both agencies.

CORRES CONTROL	X	X
PATS		
ADMN. RECORD	X	X
WASTE REC CTR		
TRAFFIC		

If you have any questions, please contact Steve Nesta at extension 6386.

CLASSIFICATION:	
UCNI	
UNCLASSIFIED	
CONFIDENTIAL	
SECRET	

Dennis W. Ferrera

AUTHORIZED CLASSIFIER
SIGNATURE:

Dennis W. Ferrera
Vice President and Project Manager
Remediation, Industrial D&D, and Site Services

NA
Date:

IN REPLY TO RFP CC #:

SMN:rlm

ACTION ITEM STATUS:
 PARTIAL/OPEN
 CLOSED

Enclosures:
As Stated

LTR APPROVALS:
(Last Name) _____
(Last Name) _____

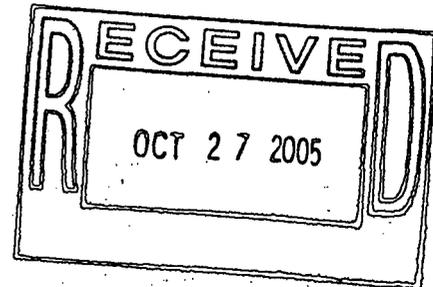
Original and 1 cc – Richard J. Schassburger

ORIG. & TYPIST INITIALS:
SMN:rlm

CC:
John Rampe

Letter # DWF-106-05

Kaiser-Hill Company, L.L.C.
Rocky Flats Environmental Technology Site, 10808 Highway 93, Unit B, T130F, Golden, CO 80403-8200 ♦ (303) 966-6386



ADMIN RECORD

SUMMARY OF B371 CLOSEOUT REPORT RESPONSE TO COMMENTS TO CDPHE

- 1) Fig 1 - Please provide a new figure 1 (Sector 5A Underground Utilities) that shows the location and identifies all facilities included in Table 1-1, as well as all the facilities discussed in this Report.

RESPONSE:

New Figure 1 is provided.

- 2) Fig 2 (Sector 5A Underground Utilities) – Please include the condition of all infrastructure, including the information regarding disconnection, removal, plugging, grouting, etc. This should also include the foundation drains (371, 374, 520, etc) and slabs. At a minimum, it is our understanding that the slab of B374 also remains and that the trailers have been removed.

RESPONSE:

New Figure 2 is provided.

- 3) Section 1.1.9 – Why are all of these tanks not included in Table 1-1 or shown on the figures?

RESPONSE: Table 1-1 has been revised as indicated in text revision 1

- 4) Section 1.2, page 12, 1st paragraph, & Section 1.1.3 – Please correct the discussion regarding the Type 1 and 2 facilities.

RESPONSE:

Text in revision 1 reflects proper typing of tanks.

- 5) Section 2.1, 2nd paragraph – Please provide an explanation why the sets 18, 19, 56, 57, & 58 do not appear on the PDSR maps.

RESPONSE:

A map for B374 sets 18, 19, 56, 57, & 58 is provided in Attachment C.

- 6) Section 2.2 & Table 2-2 – Please provide a figure showing these Decommissioning Areas, or address why a figure is not appropriate.

RESPONSE:

A map of the Decommissioning Areas is provided in Attachment H. Additionally, a description of each area has been added to each area of Table 2-2.

- 7) Section 4.0, 1st paragraph – Please include the Pre-Demolition Survey (PDS) as another characterization that was performed.

RESPONSE:

The text for this paragraph has been modified to include verbiage for pre-demolition surveys as part of the characterization of the facility.

SUMMARY OF B371 CLOSEOUT REPORT RESPONSE TO COMMENTS TO CDPHE

- 8) Section 6.2.4 – Please identify the areas (provide a figure) where ORISE performed the IV surveys in each phase. Also, please include the ORISE report as an appendix to this Closeout Report.

RESPONSE:

The ORISE Report for B371 had not yet been finalized as of this writing. DOE has committed to providing CDPHE a copy of the final report when it arrives.

- 9) The letters and CRs identified in Tables 4-1, 5-4, 6-2, and 7-5 should be included in an appendix to this Closeout Report.

RESPONSE:

The documents identified from the tables above are attached to this report revision as Attachment G.

- 10) Section 7.1 – Please re-phrase this discussion to recognize that although contaminated concrete above 6 feet of final grade remained, as well as remaining contaminated equipment, all was to be removed after demolition. Also add discussion of removal and disposition of the collection basin, including characterization, treatment, and disposal of the water.

RESPONSE:

The text for 7.1 has been expanded to include verbiage regarding the contamination pieces left behind to be removed during controlled demolition. Additionally, text has been added to discuss the retention basin used to collect dust suppression water.

- 11) Section 7.1.1, 1st sentence of 1st paragraph – Please change to read “...Building 371, and removal of all remaining contaminated components, rubble, and equipment, the entire...”

RESPONSE:

Incorporated into document text.

- 12) Section 7.1.1, 2nd paragraph – Please provide an explanation for the Phases being discussed including a figure showing the extent of each of these phases. Also please expand this discussion to include a discussion of the fill procedure and extent of fill. This should include the height of the fill, north and south sides, removal of the floor/ceiling beams and upper part of the walls of the basement, the filling of the stairwells after removal of the metal stairs, etc.

RESPONSE:

Section 7.1.1 has been rewritten.

- 13) Attachment E – Please provide the other figures for all of B371/374 Phases, such as the basement, sub-basement, attic, etc.

RESPONSE:

Additional maps are provided in Attachment E.

SUMMARY OF B371 CLOSEOUT REPORT RESPONSE TO COMMENTS TO CDPHE

- 14) Section 7.3, 3rd paragraph – Please expand this discussion to recognize that the floor of Phase III was the ceiling of the basement, which did not meet unrestricted release criteria (URC), thereby the designation of LLW.

RESPONSE:

Text changed in document to reflect that the floor of Phase III was also contaminated ceiling of the basement.

- 15) Section 7.3, 4th paragraph – Please add a description of Phase IV (areas of B371), other than “the hardened structure”.

RESPONSE:

More description of this has been added to the document.

- 16) Section 7.3.2, 1st sentence – Please edit this to read “...proposed grade with levels of remaining contamination above URC that met...”

RESPONSE:

Text is incorporated.

- 17) Attachment D (Section 7.3.2) – Please provide figures showing the locations of these areas investigated.

RESPONSE:

Maps showing these locations can be found in Attachment E of the “Building 371/374 Closure Project Characterization Plan,” a complete copy of which is appended to Attachment D of this Closeout Report.

- 18) Section 7.3.2 - Please provide the “Building 371/374 Closure Project Characterization Plan” in an appendix. Also, please include recognition that this Plan was not approved by CDPHE.

RESPONSE:

The “plan” is attached as noted (see #17 above). Text of 7.3.2 has been amended to state that while the PDSR for Phase II was approved by CDPHE, it did not constitute approval of the Building 371/374 Closure Project Characterization Plan.

- 19) Section 7.3.2, 3rd paragraph – Please identify the Section 11.0 mentioned, as a part of this document or in the “Plan”.

RESPONSE:

Change made in text.

- 20) Section 7.3.2 – Please include a discussion of the nature, levels (dpm), and amount of remaining contamination (grams of Pu, Am, etc), and locations.

RESPONSE:

Maps of the locations where the DOP Scans (Survey Areas C through G) were conducted have been included in Attachment D to provide the areas where the contamination was

SUMMARY OF B371 CLOSEOUT REPORT RESPONSE TO COMMENTS TO CDPHE

left. The text of the document is modified to include values of the remaining contamination. Total nCi is 2.2E8, and total weight in grams is 2.9E9; leaving approximately 0.076nCi/g.

- 21) Section 7.3.3 – Please modify this discussion to properly address the topic. Suggest changing this discussion to the following: “Concrete removed from sections above minus six feet was either sent off site as low level waste or sanitary waste, or if it was determined to be uncontaminated and met the requirements of the Concrete Recycling RSOP it was processed on site for use as fill. Concrete recycling followed the requirements of the Concrete Recycling RSOP. No recycled concrete was placed within three feet of final grade.” Also, please identify the approximate amount of concrete that was recycled and where it was placed.

RESPONSE:

Section changed to “Managing Concrete Removed During Demolition,” and information was clarified.

- 22) Section 7.3.4 – Please modify the 2nd paragraph by inserting “were” in the 2nd sentence between “which” and “analyzed”. Also, suggest adding “or any of the other samplers” to the end of the last sentence of the 2nd paragraph. In addition, we are not aware of the issue raised in the last paragraph, which appears to be related to the activities associated with the demolition of B771/774 rather than B371/374. Please provide the data and specific pipe chase excavation to support this concern, or modify as appropriate.

RESPONSE:

Corrections made as noted, and last two sentences were deleted because they did not pertain to B371/374.

- 23) Section 7.3.5 – Please add discussion regarding the addition of dust suppression hoses that were attached to the equipment to spray directly on the work area from the ends of the large equipment performing the demolition activities.

RESPONSE:

Text of 7.3.5 has been modified to account for innovative dust suppression methods.

- 24) Table 7-5 – Please correct the table to remove the duplicate reference to the CR for the Demolition of the Carpenter Shop.

RESPONSE:

Done.

- 25) Section 8 – Please provide an explanation for what is meant by and why the “amounts were converted to the estimate unit of measurement for comparison”.

RESPONSE:

The statement was deleted because it was put into the document as a reminder for dealing with draft values. A new table is presented with final waste values.

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- 26) Table 8-0 – 1) Please identify the specific sanitary landfill utilized for the wastes generated. 2) Please provide the specific facility utilized for the RCRA wastes. 3) Please provide the actual volumes and mass generated and sent.

RESPONSE:

1. Sanitary landfill is identified as Foothills Landfill in Golden, CO.
2. Straight RCRA waste was sent to Kettleman Hills Facility in Kettleman City, CA.
3. Volumes are provided in table

- 27) Please add discussion to this document describing the post demolition condition of this cluster. What was removed, what actions were performed on remaining infrastructure and the condition of remaining infrastructure (removal, plugging, disruption, etc), including location and amounts of remaining contamination.

RESPONSE:

See Figures 1 & 2.

- 28) Need to modify the figures provided or provide additional figures to properly show all removed and remaining infrastructure, including the condition of slabs, walls, drains, sewers, etc.

RESPONSE:

See Figures 1 & 2.

- 29) Please add a discussion as to the final land configuration, including the removal of the Railroad, Functional Channel 2, groundwater flow and installation of monitoring wells. Also, include a discussion of the surface soil investigations/scans performed and contaminated soil removals during and after demolition activities, including railroad removal.

RESPONSE:

The land surface at B371/374 was contoured to form a subtle, gently rounded hill that will shed any surface water runoff that may occur toward the north, south, east, and west. The railroad spur previously used to load out waste from the complex was removed and Functional Channel 2 was cut along part of the railroad path.

Groundwater flow is monitored by four wells generally located on the west, north, and southeast of the building complex. Each well is immediately adjacent to the former complex and replaces a pre-existing well. The well on the east of the complex was relocated somewhat with respect to the pre-existing well, in order to be both closer to the complex and to target the subsurface foundation drains. Groundwater in the area southwest of the complex is not monitored because this direction is hydrologically upgradient of the complex.

The wells on the north and east of the complex will be monitored for analytical samples in addition to flow, in accordance with the Revised FY05 Integrated Monitoring Plan (IMP; September 2005) developed through numerous meetings with the regulators and stakeholders. Included in the analytical suites at two of these wells will be samples for Pu and Am analysis. These two wells were selected on the basis of groundwater flow

SUMMARY OF B371 CLOSEOUT REPORT RESPONSE TO COMMENTS TO CDPHE

modeling (one is downgradient of the residual basement contamination) and to monitor groundwater adjacent to the now-interrupted foundation drains.

All four monitoring wells were installed using a dual-wall percussion hammer rig after final grade at the respective well location was achieved. Each well is constructed of two-inch PVC. The wells were designed to screen the entire saturated fill/alluvium interval, with the screened interval extending into the weathered bedrock. The three wells that will be monitored for analytical samples are currently classified in the IMP as Sentinel wells, which are sampled every six months.

Surface soil samples were collected across the B371 area to support downposting the area. Samples were collected at approximately 100 ft spacing across the building footprint and at biased locations in the decon area and along the railroad tracks and loading ramps. Samples were collected after the basements were backfilled, but prior to addition of soil in support of the final land configuration. Samples were analyzed by the field screening lab.

One area on the main loading ramp was above action levels for plutonium. Soil was removed until the sidewalls and excavation base were below action levels. The contaminated material resulted from waste loadout.

Two locations in the area used for decontamination of equipment were above action levels for plutonium and soil was removed as above because the area was less than 3 feet below final ground surface. An additional area in the west part of this area was above ALs for plutonium, but less than 100 pCi/g in an area that was approximately 6 feet below final grade. This area was not excavated.