Revised 12/03

CORRES. CONTROL
INCOMING LTR NO.
00150RF04
DUE DATE
ACTION

RECEIVED
2004 MAR 29 A 10: 25
CORRESPONDENCE CONTROL

Department of Energy
ROCKY FLATS PROJECT OFFICE
10808 HIGHWAY 93, UNIT A
GOLDEN, COLORADO 80403-8200

MAR 24 2004

04-DOE-00211

DIST.	LTR	ENC
BERARDINI, J.H.	X	X
BOGNAR, E.S.	X	X
BROOKS, L.	X	X
BUTLER, L.	X	X
CARPENTER, M.	X	X
CROCKETT, G. A.		
DECK, C. A.	X	X
DEGENHART, K. R.	X	X
DIETER, T. J.		
DIETERLE, S. E.		
FERRERA, D. W.	X	X
GIACOMINI, J. J.		
LINDSAY, D. C.	X	X
LONG, J. W.		
LYLE, J. L.		
MARTINEZ, L. A.	X	X
NAGEL, R. E.	X	X
NESTA, S.		
NORTH, K.	X	X
PARKER, A. M.	X	X
RODGERS, A. D.		
SHELTON, D. C.	X	X
SPEARS, M. S.		
PIZZUTO, V. M.		
TUOR, N. R.	X	X
WIEMELT, K.		
WILLIAMS, J. L.		
ZAHM, C.	X	X
Gilbreath	X	X

COR. CONTROL	X	X
ADMIN. RECORD	X	X
PATS/130		

Reviewed for Addressee
Corres. Control RFP
3/29/04 LC
Date By

Ref. Ltr. #

DOE ORDER #
5400.1

Mr. Steven H. Gunderson
Rocky Flats Cleanup Agreement Project Coordinator
Colorado Department of Public Health and Environment
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530

Dear Mr. Gunderson:

The purpose of this letter is to transmit Minor Modification #6 to the Building 771/774 Closure Project Decommissioning Operations Plan (DOP) for your approval. This minor modification clarifies the implementation of removal of contaminated portions of the building shell, in accordance with the process outlined in the Rocky Flats Cleanup Agreement Standard Operating Protocol for Component Removal, Decontamination and Size Reduction Activities.

We look forward to the continued sharing of information as more planning for demolition is accomplished. Your support to accomplish the closure and removal of Building 771/774 in a safe and timely manner is greatly appreciated. Please feel free to direct any questions to Gary Morgan at (303) 966-6003 or Warren Seyfert at (303) 966-5925.

Sincerely,

Joseph A. Legare
Manager for Project Management

Enclosure

cc w/Encl.:
F. Lockhart, OOM, RFPO
G. Morgan, HQCPM, RFPO
W. Seyfert, RPM, RFPO
M. Aguilar, USEPA
D. Onyskiw, CDPHE
C. Gilbreath, K-H
D. Shelton, K-H
Administrative Record

RECEIVED
MAR 30 2004
ADMIN RECORD

DOCUMENT CLASSIFICATION
REVIEW WAIVER PER
CLASSIFY. ROM OFFICE

B771-A-000221

RECORD OF MODIFICATIONS

DOP Modification #	Effective Date	Description
1	6/7/00	Field modification to clarify the endstate
2	6/14/00	Field modification to separate Set 38 into four separate sets
3	3/2/01	Major modification incorporating under building contamination remediation and demolition activities
4	9/6/01	Minor modification to clarify Section 5.3.2 since tap and drain activities are complete
5	8/25/03	Major modification to update the DOP with respect to the Modifications to RFCA Attachments, approved June 2003, and current status of the project. Due to the Modifications to RFCA Attachments, approved June 2003, the proposed action memorandum for under building remediation has been removed. The environmental restoration activities associated with the 771 Closure Project area will be addressed through other RFCA decision documents, as appropriate.
6		Minor modification to reflect the difficulties associated with decontaminating some elements of the structure to unrestricted release and implementation of removal of contaminated portions of the building shell, in accordance with the process outlined in the RSOP for Component Removal, Decontamination and Size Reduction Activities.

2

Modifications to RFCA Attachments, approved June 2003, decontamination and facility preparation before demolition will adhere to the following criteria:

- The Building 771/774 slab and structure within 0 to 6 feet of the final proposed grade will be decontaminated to the unrestricted release criteria or removed and all structure within 0 to 3 feet of the final proposed grade will be removed during demolition.
- The Building 771/774 slab and structure below 6 feet of the final proposed grade will be decontaminated to ensure that it will not exceed 7 nCi/g and encapsulated to ensure that the removable contamination will not exceed the unrestricted release criteria.

It is anticipated that if the contamination is surficial, it will generally be decontaminated. If the contamination extends several inches into the concrete, the concrete will generally be removed, if it exceeds 7 nCi/g. If contamination is within 6 feet of the final proposed grade and decontamination is impracticable, the process outlined in the RSOP for Component Removal, Decontamination and Size Reduction Activities will be implemented for removing contaminated portions of the building shell. Prior to removing contaminated portions of the building shell, a contact record will be prepared documenting the controls that will be used during removal efforts and LRA concurrence.

The decontamination will be performed in the following general sequence.

At the close of the Dismantlement Set activities, the areas will be empty of gloveboxes, tanks and systems providing services to gloveboxes and tanks. The electrical systems supplying lighting and distribution will remain in place, and the Zone I and II ventilation systems will have been removed. Asbestos removal internal to the structure will be completed, and the areas will be isolated from the balance of the structure to allow decontamination activities.

Room or area walls will be used as containment barriers, or temporary containment barriers will be installed to ensure that decontamination activities are isolated from the balance of the structure. This will ensure that migration of contamination can not occur to the balance of the structure. Mobile HEPA ventilation will be installed for ventilation of areas requiring decontamination. HEPA ventilation exhausted to the environment will be monitored, or exhausted to the building ventilation systems. Dismantlement activities associated with Sets will be accomplished before commencement of dismantlement and decontamination activities associated with the Decommissioning Areas.

Following Dismantlement Set activities, remaining electrical systems will be removed. Temporary electrical services will be installed. Lighting fixtures will be removed, acoustical and metal-pan ceiling fixtures removed and packaged for disposal.

Remaining safety systems will be removed back to the Area boundary, and any necessary modifications performed to replace required safety items.

Remaining utility supply systems will be removed to the Area boundary; and temporary services for support of the decontamination activities installed for supply to the Area.

Interior, non-load bearing block walls and/or gypsum partition walls will be removed and packaged for disposal as low-level waste (LLW).

Scaffolding will be installed throughout the facility, as necessary, to gain access to higher elevation work. Ceilings and upper walls will be decontaminated before lower walls and floors. Concrete ceilings will be decontaminated as necessary, "metal deck" ceilings wiped down, initial surveys completed, and the decontaminated surfaces covered to protect against re-contamination.

3

4.7.4 Project Cleanup, Demobilization, and Post-Demolition

The final task to be completed by the decommissioning contractor is to perform any backfill and compaction necessary to render the site safe for personnel involved in follow-on site closure actions. These backfilling operations would be limited to filling basement level openings, and providing fill material against walls to be abandoned in place to ensure they are fully stabilized. Final site backfill, re-grading, and site restoration will be conducted during the final Site remediation/restoration. The decommissioning contractor shall also be required to install final, or stabilize existing, temporary run-on/run-off controls or erosion controls. The decommissioning contractor shall then clean up the site for trash and miscellaneous debris, and demobilize.

Based on groundwater modeling and land configuration, methods may be necessary to direct the groundwater. The decommissioning project will install these groundwater management systems before demobilization and during backfill operations if the systems are not related to groundwater remediation activities, but are to maintain the stability of the area over time. It is anticipated that the groundwater control measures could include french drains, erosion control matting, and/or groundwater flow through areas punched through the Building 771/774 superstructure.

Demolition will remove the building structures to at least 3 feet below expected final grade. Concrete between 3 and 6 feet below the surface will ~~meet the decontamination requirements for~~ decontaminated to unrestricted release or removed. The remaining portions of the building deeper than 6 feet below the surface will have some plutonium and americium contamination not exceeding 7 nCi/g in some portions of the concrete. These remaining portions of the building will be from 6 to 30 feet (not sure of deepest depths) below the final surface grade.

The backfill of the remaining building and soil covering will be compacted, graded and seeded to produce surface vegetation that will be designed for surface stability of the final slope. If there is a substantial delay between the grading effort and the final seeding, measures will be taken to minimize erosion during the delay. Temporary measures could include interim vegetation, erosion control mats, application of surfactant and/or crimping the area with straw.

Based upon the completion of groundwater modeling, groundwater controls, such as the installation of a French drain to complement the footer drains, will be installed to minimize the possibility of groundwater flow over the remaining portions of the basement slab and formation of seeps that could lead to erosion of the backfill and graded soils covering the slab. The goal of groundwater controls is to minimize the possibility of erosion causing any of the remaining portions of the building to become uncovered, i.e., to maintain the 3-foot soil depth.

It is expected that the groundwater controls will be installed during the conduct of other accelerated actions that will be taken to address soil and groundwater contamination at IHSS's in proximity to the remaining portions of the buildings. In particular, it is expected that actions taken to clean up soils in IHSS 118.1, the carbon tetrachloride spill, will significantly reduce a major source contributing to groundwater contamination in this area. Other actions as necessary to protect surface water quality from contaminated groundwater will also be taken. It is expected that these actions will also address control of groundwater flow direction consistent with the erosion control goals for the remaining concrete. Such a system will require periodic inspections and potentially maintenance during post-closure. At a minimum, periodic walkdown inspections of the area for indications of erosion or seeps and slope stability conditions will be conducted and signs, as required, will be posted to minimize disturbance of the area.

4/4