

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE REGULATORY CONTACT RECORD

Date/Time: November 10, 2004

Site Contact(s): Chris Gilbreath
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Regulatory Contact: Denise Onyskiw
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Agency: CDPHE

Purpose of Contact: Building 371/374 Demolition Activities

Discussion

Numerous "lessons learned" experiences related to decommissioning and demolition activities in Building 771/774 have direct applicability in Building 371/374. For example, Building 371/374 contains a significant amount of plenums, penetrations and piping with residual amounts of contamination. In many cases, decontamination activities can be hazardous to the worker and very difficult, if not impossible. As a result, the 371 Project proposed to utilize the radiological and beryllium controls (see below) that were successfully demonstrated during the decommissioning and demolition of Building 771/774 for the disposition of certain systems/equipment.

Plenums

The two remaining plenums in Building 374 (FP-321 and FP-322) are located in Room 2808 and 2801, respectively. The rooms will be surveyed to verify the unrestricted release criteria established in the *371 Closure Project Decommissioning Operations Plan* has been met. The plenums will be surveyed to verify removable contamination is less than 20 dpm/100cm². The plenums will be removed, sized reduced and packaged as low-level radioactive waste.

The following controls shall be implemented prior to and during the size reduction of FP-321 and FP-322 plenums:

- 1) A fixative (ABC, firedam, etc.) will be applied to the interior surfaces and to the contaminated portion of the exterior surfaces of these areas.
- 2) Biased beryllium smears will be conducted to assure levels are < 0.1 µg/100 cm².
- 3) Dust suppression will be utilized during size reduction.
- 4) A fixative will be applied to the debris on a daily basis until packaged.

- 5) Utilize job-coverage air sampling during demolition to assure levels do not exceed 0.3 DAC.
- 6) If 0.3 DAC is exceeded, DAC-hour tracking shall be performed for potentially exposed individuals.
- 7) If 0.3 DAC is exceeded, or if the spread of contamination is indicated per in-process surveys, additional fixative shall be applied to the debris.
- 8) Dispose of generated waste as radioactive (LSA or SCO).

The 371 Project proposed to utilize these controls for any plenums that cannot meet the unrestricted release criteria. The disposition of any such plenum will be communicated to CDPHE through the existing consultative process and will be documented via contact record prior to implementation.

Penetrations

Building 371/374 contains numerous piping penetrations/stubs. Many of these penetrations cannot be fully decontaminated and/or surveyed to meet the unrestricted release criteria. As a result, these penetrations will be decontaminated to meet the SCO criteria or removed as TRU waste prior to demolition. For penetrations that meet the necessary SCO criteria, a fixative will be applied to the pipe internals and high visibility paint will be applied to the ends. The penetrations will be removed and packaged as low-level waste during demolition activities.

Mezzanine

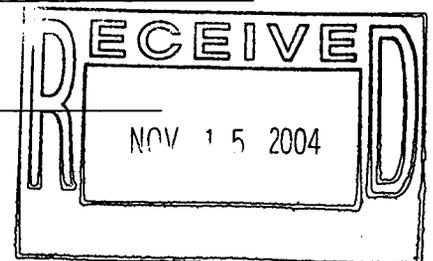
A steel mezzanine (Room 4814) located above Room 3810, in Building 374, consisted of a diamond-plated metal floor with a metal I-beam support structure. Paint sampling was conducted on this mezzanine level and results showed elevated alpha activity (fixed) within the matrix of the paint located on the floor of this structure. As such, the diamond plate flooring was removed from this structure, as much as practical, with the exception of plating attached to the I-beam support structure. The remaining support structure was left in place to be removed as low-level waste during demolition. Surveys will be conducted to ensure no removable contamination exists to establish isolation controls during final survey. If any removable contamination is detected, the area will be painted and re-surveyed to ensure fixative was effective prior to commencing Pre-Demolition Survey.

Dock 8

Dock 8 (the acid dock) which is located on the east side of Building 374 had previous spills of mixed waste. As a result, the dock will be verified to meet the unrestricted release criteria for removable contamination and dispositioned as mixed waste.

Ms. Onyskiw concurred with this proposal.

Contact Record Prepared By: Chris Gilbreath



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