

Technical Review of the Mound Site

Summary

by **EHS TECHNOLOGY GROUP, LLC**

Reference Document: Building 124 (CWPF) Action Memorandum/Engineering Evaluation/Cost Analysis for Removal Action (Building Demolition), December 2004, Public Review Draft.

Purpose: The purpose of this document is to document and allow public comment on the proposed Removal Action (Building Demolition) of Building 124 Consolidated Waste Processing Facility (CWPF).

Assessment of Review: Building 124 was constructed in 1998 as a temporary, pre-engineered Rubb Building (tent-type building). Building 124 was designed and constructed to perform various volume reduction and repackaging functions that included: soil blending of Transuranic (TRU) soils; opening/venting Tritium/TRU containers for repackaging; compaction of “compactable wastes” such as plastic bags of trash and cardboard; and decontamination of materials for disposal. This building was intended to process Low-Level Radioactive Waste (LLRW) materials that were generated from site demolition and safe-shutdown activities as well as legacy waste streams. As these activities continue to be eliminated from site operations, it is appropriate that this building be removed.

Technical Analysis: Building 124 is constructed of a crest, tent-type structure, which has a tension supported steel framework attached to an 8” thick concrete pad. The steel framework is covered with a rubberized fabric. The interior to the building includes a prefabricated Perma-Con enclosure (used to provide contamination control for the package opening station and drum compaction units) and a wood-framed tented enclosure (soil blending tent) adjoined to the Perma-Con enclosure. In late 2003, the wood-framed tented enclosure (soil blending tent) was removed and the facility was reconfigured for use as a heavy-duty equipment maintenance building. This portion of the floor slab, where the soil blending tent was previously located, was found to be contaminated with radioactive materials as a result of the soil blending processes. Since decontamination of this floor area failed to remove radiological constituents to a level below the Cleanup Objectives, the floor area was painted to seal the surface and a protective covering was placed over the painted area. This floor area is currently a Fixed Contamination Area (FCA). The demolition plan includes removal of the contaminated slab portion as a Low Level Radioactive Waste. The remaining uncontaminated slab area (remainder of the floor) is to be demolished and disposed of in a construction debris landfill unless radiological surveys indicate otherwise. Once the building and slab have been removed, the soils below the slab will be screened for contamination. Any removal action necessary for residual contamination in the soils will be part of the PRS 41 Removal Action.

As always, coordination between CH2M Hill, the cleanup contractor at the Mound site, and Miamisburg Mound Community Improvement Corp. (MMCIC - the developer of the site) will result in the return of these areas to that proposed in the Mound Comprehensive Reuse Plan.

Substantive Comments: EHS concurs with the proposed Removal Action for Building 124, including the building and slab. We understand that the soils below the slab will be screened and if removal is necessary it will be incorporated with the PRS 41 Removal Action. Coordination between CH2M Hill, the DOE and MMCIC is important to ensure that the Building 124 area is left in a condition consistent with the Mound Reuse Plan. This is more important after the PRS 41 Removal Action of the soils.

EHS, along with MMCIC, will monitor the progress of the removal action. Notification of the Verification Sampling and Analysis Plan and the On-Scene Coordinator Report for this site would be appreciated.

If EHS’s understandings are correct, no specific response to the above comment is necessary, and we understand that these comments will be included in the OSC report.