

Technical Review of the Mound Site

Summary

by **EHS TECHNOLOGY GROUP, LLC**

Reference Document: Buildings 31 (PRS 268) and 31 A (Demolition in accordance with Action Memo/EE/CA for Contingent Removal Actions for Contaminated Soils, Addendum 1: Structures) ; Public Review Draft, June 2004

Purpose: The purpose of this document is to notify the public of the Demolition Activity proposed for Buildings 31 and 31A. In addition to the removal of these two structures and their slabs, the asphalt staging area, and the metal grates and truck dock to the south of Building 31 will be removed. This Building Data Package, with Fact Sheet included, satisfies the Public Notification requirements as outlined in the Action Memorandum/Engineering Evaluation/Cost Analysis, Contingent Removal Action for Contaminated Soil, June 2002, Final.

Assessment of Review: Buildings 31, constructed in 1965, and 31A, constructed as an addition to Building 31 in 1984, had been used to store, stage, and prepare for offsite shipment of low level radioactive wastes generated from SM building; store thorium drums; decontaminations and decommissioning (D&D) projects, environmental restoration projects, wastewater treatment processes, and laboratory activities.

In addition, an asphalt staging area completely surrounds Buildings 31 and 31A. This asphalt area roughly matches the boundary of PRS 268. A truck dock, constructed of concrete, is located about 80 feet south of Building 31. The truck dock, which appears from the aerial views of the site to have been constructed between 1983 and 1994 was used to load boxes of contaminated soil onto semi-trailers through the rear doors of the trailers.

The staging area between Building 31 and the truck dock (south of Building 31) is covered with interlocking metal grates. The metal grates were installed about 1988 to cover a deteriorating asphalt staging area that was covering soils contaminated with thorium. Each metal grate is approximately 20 inches wide and 12.5 feet long. The interlocking metal grates cover a staging area that measures about 63 feet wide by 80 feet long.

These two structures and their slabs, the asphalt staging area, and the metal grates and truck dock to the south of Building 31 will be removed. Contaminants found include plutonium-238 and thorium-232.

Technical Analysis: In 2002, the Action Memorandum, Engineering Evaluation/Cost Analysis was prepared as a Contingent Removal Action for Contaminated Soils. The idea was to streamline the cleanup process for specific types of soils contamination. The soils considered for the CRA would have similar properties including type of contamination, contaminant concentrations, and isolated areas of contamination. The Action Memorandum for these cleanups would be presented in the form of a Fact Sheet. The Fact Sheet would include all pertinent information associated with the PRS and cleanup, including a description/history of the PRS, contaminants of concern (COCs), risk criteria, background levels, cleanup objectives, environmental surveillance measures, verification sampling, schedule of activities, and cost estimate. This Building Data Package, with associated Fact Sheet, fulfills these requirements.

The Cleanup could be performed in conjunction with the public review of the Fact Sheets. The public would still have the opportunity to comment on all aspects of the Removal Action. Verification sampling would not be performed until after the public comment period, allowing regulators to consider all comments before verifying the Removal Action is complete. Cleanup of this area is scheduled for summer 2004.

EHS has had the opportunity to review and comment on this Building Data Package and associated Fact Sheet. We concur with the planned removal action (RA) for the buildings, asphalt staging area, truck dock and metal grates due to elevated levels of plutonium-238 and thorium-232 found throughout this area. This area roughly represents the area known as PRS 268.

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

Substantive Comments: EHS concurs with the planned removal action (RA) for Buildings 31 and 31A, the asphalt staging area, the truck dock and the associated metal grates. Coordination between CH2M Hill, the DOE and MMCIC to ensure the building area is left in a condition consistent with the Mound Reuse Plan.

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.