

Technical Review of the Mound Site

Summary

by **EHS TECHNOLOGY GROUP, LLC**

Review Date: September 20, 2004

Reference Document: Buildings R, SW, 58, and 68 Slab Removal Action, Action Memorandum, Addendum 1, Public Review Draft, August 2004.

Purpose: The purpose of this document is to notify the public of the addition of two Potential Release Sites (PRSs) PRS 253 and PRS 254 to the PRSs included in the Building R, SW, 58 and 68 Slab Action Memorandum. The two additional PRS are associated with the T-West Stack (PRS 253) and T-East Stack (PRS 254). Because these additional PRS are in the vicinity of the demolition and decontamination activities in the Building R and SW area, and because the Contaminants of Concern (COC) are the same as those outlined in the original Action Memorandum, incorporation of PRS 253 and 254 represents efficiencies in budget, manpower, and scheduling.

Assessment of Review: Building R is one of the original buildings constructed on the Main Hill in 1948. It had a hot side associated with radiological areas used for tritium recovery, plutonium work and analytical support. Building SW is also on the Main Hill and was originally constructed in 1950. Since then, the building has undergone 13 major additions. This building was used for tritium recovery and purification, tritium component development, component evaluation, and analysis of materials. The past operations included research projects on plutonium, actinium, radium, uranium, thorium and protactinium. Building 58 contains the alpha and beta filter banks for Building SW. The Building 68 slab will be used for equipment staging during the cleanup activities at Building R, SW and 58. The T-East and T-West stacks are exhausts stacks that serviced the T Building. The T-Building was host to various research, development and production programs, including two major isotopes of polonium and tritium. The two additional PRS (253 and 254) are associated with these exhaust stacks.

Technical Analysis: In August 2004, an Addendum was added to the Action Memorandum for the Buildings R, SW, 58 and 68 Slab Removal Action (originally dated June 2003). The purpose of the addendum was to include two additional PRS to the removal action. Since the PRSs are in close proximity to the removal action, it is appropriate to include them in this cleanup activity. In addition, these two PRS share most of the same contaminants of concern (COC) as the original cleanup PRS. Three additional COC have been included as a result of these PRS associated with the T Building stacks. The additional COC are Bismuth-210m, Cobalt-60 and Silver 108m. These COC will be added to the cleanup verification sampling protocol.

EHS has had the opportunity to review and comment on this both the original Action Memorandum and the Addendum dated August 2004. We concur that it is appropriate to include and address these PRS 253 and 254 with the other cleanup activities addressed with the Building R and SW remediation.

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 remediation of PRS 253 and 254 being included with the Building R and SW cleanup. Coordination between CH2M Hill, the DOE and MMCIC to ensure the 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.