

Technical Review of the Mound Site

Summary

by **EHS TECHNOLOGY GROUP, LLC**

Reference Document: PRS 106 Data Package, Public Review Draft, November 2004

Purpose: The purpose of this document is to notify the public of the status (No Further Action) of the Potential Release Site (PRS) 106.

Assessment of Review: EHS has had the opportunity to review and comment on this PRS Data Package. We concur with the planned No Further Action status for PRS 106. This data package was prepared in accordance with the requirements specified in the *Work Plan for Environmental Restoration (ER) of the DOE Mound Site, The Mound 2000 Approach*. As such, all appropriate inquiry was made into the condition of the potential release site.

Technical Analysis: PRS 106 consists of the soils under the G Building. The G Building is the location of the garage for the site. This garage was constructed in 1947 and placed into service in 1948. It served as the site's garage until its demolition in 2003. The garage was used for vehicle maintenance and parking. Because of its use, the building was suspected of causing gasoline or solvent contamination to the soils below the building slab.

Several sampling activities were performed at this PRS. A site wide radiological scoping survey was conducted during the 1980's. During this sampling, only two contaminants of concern were sampled. These included plutonium 238 (Pu-238) and thorium 232 (Th-232). All detected levels in the vicinity of PRS 106 were well below cleanup standards. In addition, a soil vapor survey was conducted in 1995. The potential risk from the detected soil vapor concentrations was compared to the Soil Vapor Screening Level. All detections were well below the calculated Soil Vapor Screening Levels.

In 2004, additional soil sampling was performed at PRS 106 after the slab for the G Building was removed. Four samples were collected in areas suspected to contain contamination due to cracks in the concrete or drainage from the building. Although one sample had Benzo(a)pyrene above the Risk Based Guideline Value, there was no concentration detected above the Risk Based Cleanup Objective.

Finally, an evaluation was made to determine if any volatile organic compounds (VOC) or polycyclic aromatic hydrocarbons (PAH) could leach through the soils, causing contamination to the groundwater. A methodology was used to compare soil contaminant concentrations to the calculated "soil screening levels for leaching to groundwater". In all cases it was determined that the soil result is less than the calculated soil screening levels for leaching to groundwater.

Substantive Comments: EHS concurs with the No Further Action recommendation for the soils under the G Building, called PRS 106. We understand that sampling in the area has determined that all soils contaminants are below the cleanup objective and calculations show little potential for leaching to the groundwater. Therefore, this PRS should not present a significant environmental concern at the site.

Coordination between CH2M Hill, the DOE and MMCIC to ensure the PRS 106 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.