

Technical Review of the Mound Site
Prepared for the Expericenter
by **EHS TECHNOLOGY GROUP, LLC**

Reference Document: Public Fact Sheet, PRS 363: Plutonium -238 Contaminated Area, September 2004, Public Review Draft

Purpose: The purpose of this document is to allow for the removal of plutonium 238 contaminated soils in the southwest portion of the site. This removal is proposed under the Contingent Removal Action Memorandum. (Action Memorandum, Engineering Evaluation/Cost Analysis, Contingent Removal Action for Contaminated Soil, June 2002).

Background: In 2002, the Action Memorandum, Engineering Evaluation/Cost analysis was prepared as a Contingent Removal Action for Contamination 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.

During the OU5 Non-AOC (Area of Concern) investigation (OU5, Operational Area Phase I Investigation Non-AOC Field Report, Volume 1, June 1995), PRS 363 was identified due to elevated plutonium-238. During this OU5 Investigation, surface soils were evaluated for hydrocarbons and radionuclides. Although no hydrocarbons were found at elevated levels, two sample locations had elevated levels of plutonium-238 (94 pCi/g and 85 pCi/g versus the cleanup objective of 55 pCi/g). No radioactive or hazardous waste generating processes are known to have occurred at the location of PRS 363. However, due to the limited amount of soils, removal is considered to be more cost effective than further investigation.

Technical Assessment: EHS has had the opportunity to review this fact sheet for PRS 363. EHS concurs that a limited cleanup is more cost efficient than further investigation and agrees with the actions outlined in the Fact sheet.