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**PROGRESS REPORT OPERABLE UNIT 2 SOLID  
WASTE UNITS JULY 1991**

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PROGRESS REPORT**



## Operable Unit 2 SOLID WASTE UNITS

### Introduction

The Remedial Investigation/Feasibility Study (RI/FS) is the blueprint for cleanup at the U.S. Department of Energy's Fernald Site. The nature and extent of contamination at the site and surrounding areas is being thoroughly investigated so that appropriate remedial actions can be formulated and implemented.

The Fernald Site has been divided into five sections, known as Operable Units, for environmental investigation and cleanup. The Operable Units were defined based on their location or the potential for similar technologies to be used in the ultimate cleanup.

During the course of the RI/FS effort, certain conditions are occasionally identified which call for more immediate action. These actions are called "Removal Actions" and are initiated when there is a need to accelerate cleanup activities to address releases or potential releases of hazardous substances. Removal Actions are coordinated with the U.S. EPA and the Ohio EPA.

Following is a progress report on Operable Unit 2 including its history, the current status of RI/FS activities, cleanup alternatives under consideration, and work that is being conducted to alleviate near-term concerns.

### Background

Operable Unit 2 includes the Sanitary Landfill, Lime Sludge Ponds, Inactive Fly Ash Disposal Area, Active Fly Ash Area and the Southfield Area. These areas were used to dispose of fly ash, spent lime, sanitary waste and construction rubble from past operations at the Fernald Site. Operable Unit 2 contains large volumes of waste materials with relatively low concentrations of radioactive and chemical contaminants. While uranium is the primary contaminant, investigations are in progress to confirm that elevated concentrations of other materials including hazardous constituents are not present within Operable Unit 2 facilities.

### RI/FS Activities

- Additional samples to support the Operable Unit 2 RI/FS were obtained from the Lime Sludge Ponds, Southfield Area, Active Fly Ash Area, and the Inactive Fly Ash Area between May and July 1991. The Sanitary Landfill is scheduled for sampling in July. These samples are being collected to supplement existing characterization data available for these facilities. The samples will be analyzed for a range of chemical and radiological parameters to support waste treatment studies and ongoing modeling efforts.
- DOE is currently reviewing a draft treatability study work plan which will be submitted to the U.S. EPA for approval. Data generated by the study will be used to support Operable Unit 2 treatment technology selection and implementation.
- The Operable Unit 2 Initial Screening of Alternatives (ISA) Document-Task 12 was disapproved by the U.S. EPA. A revised ISA was prepared and submitted for U.S. EPA review in April, and was approved by the U.S. EPA in June.
- Other RI/FS documents for Operable Unit 2 are on hold pending receipt of the needed characterization and treatability data.

### Cleanup Alternatives

Several cleanup options have been evaluated for Operable Unit 2. One method would entail placing a cover over the wastes to cap them in place and prevent stormwater runoff from carrying contaminants to groundwater and surface waterways.

Under a second alternative, contaminated water located beneath the waste units would be isolated, removed, and treated before being discharged to the Great Miami River. Then a cover would be placed over the solid waste units as a final step.

Other options include removing the waste, treating it, and either disposing of it in an engineered structure on the Fernald Site, or transporting it to an approved off-site waste disposal facility.

**Removal Actions**

The *Inactive Fly Ash/Southfield Area Removal Action* focuses on low concentrations of surface contamination in the Inactive Fly Ash/Southfield Area, which is located in a remote area on the Fernald Site. Fly ash is a waste residue that results from burning coal in the boiler plant. Results from sample analysis revealed locations with slightly elevated concentrations of uranium in the surface soils in the Inactive Fly Ash/Southfield Area.

Actions to be implemented include roping or fencing the areas to restrict access, and the installation of warning signs until final remediation is determined. 2327

More information about Operable Unit 2 is available in the Public Environmental Information Center (PEIC), where Fernald Site cleanup documents are kept in the Administrative Record. The PEIC is located in the JAMTEK building, 10845 Hamilton-Cleves Highway, Harrison, Ohio, 45030. The telephone number is (513) 738-0164.