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OPERABLE UNIT 5 - AQUIFER RESTORATION PROJECT FACT SHEET -  
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FACT SHEET

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# Operable Unit 5

## *Aquifer Restoration Project*

September 1996

### Introduction

The remedy for the Great Miami Aquifer is announced in the *Record of Decision for Remedial Actions at Operable Unit 5* and was signed by the U.S. Environmental Protection Agency (EPA) on Jan. 31, 1996.

### Selected Remedy for the Great Miami Aquifer

Areas of the Great Miami Aquifer exceeding final remediation levels will be restored through extraction methods. Groundwater modeling indicates that 28 extraction wells are needed to restore the aquifer. The 28 wells are divided into four extraction well systems:

- the South Field Extraction System;
- the South Plume Extraction System;
- the Plant 6 Area Extraction System; and
- the Waste Storage Area Extraction System.

As part of the selected remedy, DOE will investigate and apply, if appropriate, innovative technologies such as reinjection. It is anticipated that reinjection will help flush contamination to extraction wells and shorten the time needed to restore the aquifer.

### Remedial Design

In July, the draft *Final Remedial Design Work Plan for Remedial Actions at Operable Unit 5* was approved by the U.S. and Ohio EPAs. As required by the Amended Consent Agreement, the remedial design work plan identifies overall design and strategy for remedy implementation and schedules for delivery of design documents to EPA. The Operable Unit 5 remedial design work plan fulfills this requirement.

### Great Miami Aquifer Remedy Objectives

The five objectives of the Great Miami Aquifer remedial design process are to:

- 1) Accommodate the need for sequential restoration modules, each independently designed, installed and operated using "learn-as-you-go" principles over the life of the remedy;
- 2) Build enhancements into the remedy, as described by the Operable Unit 5 feasibility study report and record of decision;
- 3) Develop a solid remedial approach that has the potential to accomplish remedial action objectives within the aggressive time frames contained in Fernald's current funding baseline (10 years);
- 4) Accommodate transition of the existing groundwater extraction and treatment infrastructure and early-start actions with a coordinated sitewide final remedy; and
- 5) Satisfy discharge limits for the release of groundwater, stormwater, and remedial wastewater to the Great Miami River.

The remedy for the Great Miami Aquifer is unique in that major elements of the remedy have already been designed and implemented as a result of EPA-approved early-start initiatives and groundwater-related removal actions.

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These elements include the Advanced Wastewater Treatment (AWWT) facility, the South Field Extraction System, and the South Plume Removal Action recovery well system. The remedial design process will build upon this existing infrastructure.

### *For More Information*

*Contact the Public Environmental Information Center (PEIC), 10845 Hamilton-Cleves Highway, Harrison, Ohio, 45030 (phone: 513-733-0164).*

*For specific questions regarding Operable Unit 5, contact: Rob Janke, DOE-FEMP Operable Unit 5 team leader, 513-648-3124.*