

Waste
Pits
Remedial
Action
Project

**(Operable
Unit 1)**

August 1997

For More Information

Contact the Public Environmental Information Center (PEIC), Delta Building, 10995 Hamilton-Cleves Highway, Harrison, Ohio 45030 (phone: 513-648-7480 or -7481); or send an e-mail message to Rene_Eichhold@fernald.gov.

For specific questions about Operable Unit 1, contact Dave Lojek, DOE-FEMP Operable Unit 1 branch chief, 513-648-3127; or send e-mail to Dave_Lojek@fernald.gov.



The Operable Unit 1 waste pits range in size from a baseball diamond to a football field and vary in depth from 13 feet to 30 feet. More than 700,000 cubic yards of contaminated materials are estimated to be associated with the cleanup of the waste pits (6600-35).

Description

Operable Unit 1 is one of five well-defined areas being remediated at the U.S. Department of Energy's (DOE) Fernald Environmental Management Project (FEMP). Each operable unit was defined based on its location or the potential for similar technologies to be used in the ultimate cleanup.

Based on investigations and studies performed to determine the nature and extent of contamination in Operable Unit 1, alternatives for Operable Unit 1 remediation were developed and analyzed to determine the most appropriate remedy. On March 1, 1995, the U.S. Environmental Protection Agency (U.S. EPA) signed the *Record of Decision for Remedial Actions at Operable Unit 1*.

Key Components of the Selected Remedy

- Excavation of the waste from the pits and residual contaminated soils from beneath the pits;
- Preparation and processing of materials from the waste pits (e.g., sorting, crushing, shredding, etc.);
- Thermal drying (as necessary to meet the waste acceptance criteria of the disposal facility);
- Treatment of off-gas by a system designed to remove, to established levels, contaminants which might be present in emissions from the drying process prior to discharge to the atmosphere;
- Off-site rail shipment to a permitted commercial disposal facility;



A railyard with storage capacity to handle 135 gondola railcars is being constructed to the north of the former FEMP Production Area. This railyard includes 11 rail tracks, which with other on-site rail improvements, reflects installation of 17,500 feet of rail, switches and turnouts (6600-61).

— Disposal at a permitted commercial disposal facility. (Until such time as this facility is selected, the remedial planning process will reflect the Envirocare disposal site, in Clive, Utah, as the representative permitted commercial disposal facility.)

— As a contingency, shipment of any waste that fails to meet the waste acceptance criteria of the permitted commercial disposal facility to the Nevada Test Site for disposal; and

— Decontamination and dismantlement of the treatment facility, upon completion of waste pit remediation activities, with dispositioning of resulting materials in accordance with the Operable Unit 3 record of decision.

Operable Unit 1 Remedial Action Work Plan

Approved by the U.S. EPA and Ohio EPA on Feb. 6, 1997, the *Remedial Action Work Plan for Remedial Actions at Operable Unit 1*, provides the framework

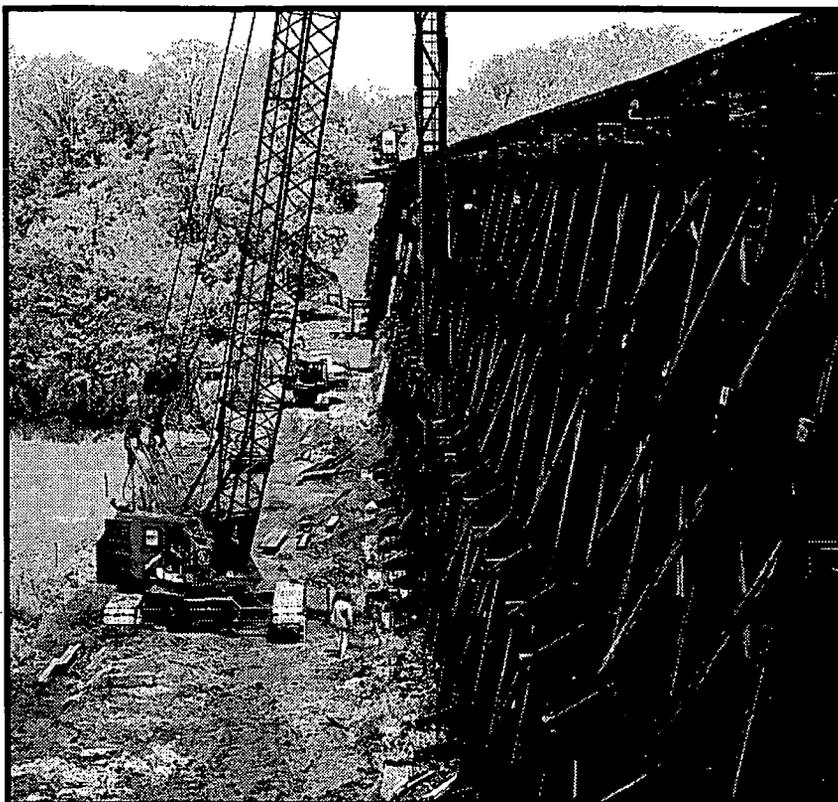
for implementing remedial activities authorized under the Operable Unit 1 record of decision and the remedial design work plan and its addendum. The overall Operable Unit 1 remedial action strategy, as well as the schedule required to implement this strategy, are presented in the remedial action work plan.

The remedial action work plan summarizes the purpose and scope of the project, describes primary requirements and considerations for implementation of remedial action, sets forth an overall implementation strategy for the Operable Unit 1 remedial action, and provides a framework document from which the remedial action deliverables will be prepared.

The project approach for implementing the remedial action, as defined in the remedial action work plan, divides the responsibility for performing the remediation activities between Fluor Daniel Fernald and an Alternative Remedial Action Subcontracting Approach (ARASA) subcontractor. Under this plan for division of work, the ARASA subcontractor is responsible for:

- excavating the waste pits and surrounding contaminated soils;
- processing the waste materials, as necessary, to meet the disposal facility waste acceptance criteria;
- and loading the processed waste into railcars (including the installation of a liner and lid) for shipment to a permitted commercial disposal facility.

Fluor Daniel Fernald and DOE FEMP will be responsible for oversight of the ARASA subcontractor's activities, including acceptance of the subcontractor's "certified-for-shipment" railcars. In addition, Fluor Daniel Fernald will be responsible for transportation (both on- and off-site) and disposal activities.



Workers are driving steel piles in preparation for replacing existing wooden beams with steel girders on the Okeana Trestle, which is 671 feet long and 100 feet high (6600-98).

The remedial action work plan also establishes the following enforceable milestones for the Operable Unit 1 remedial action:

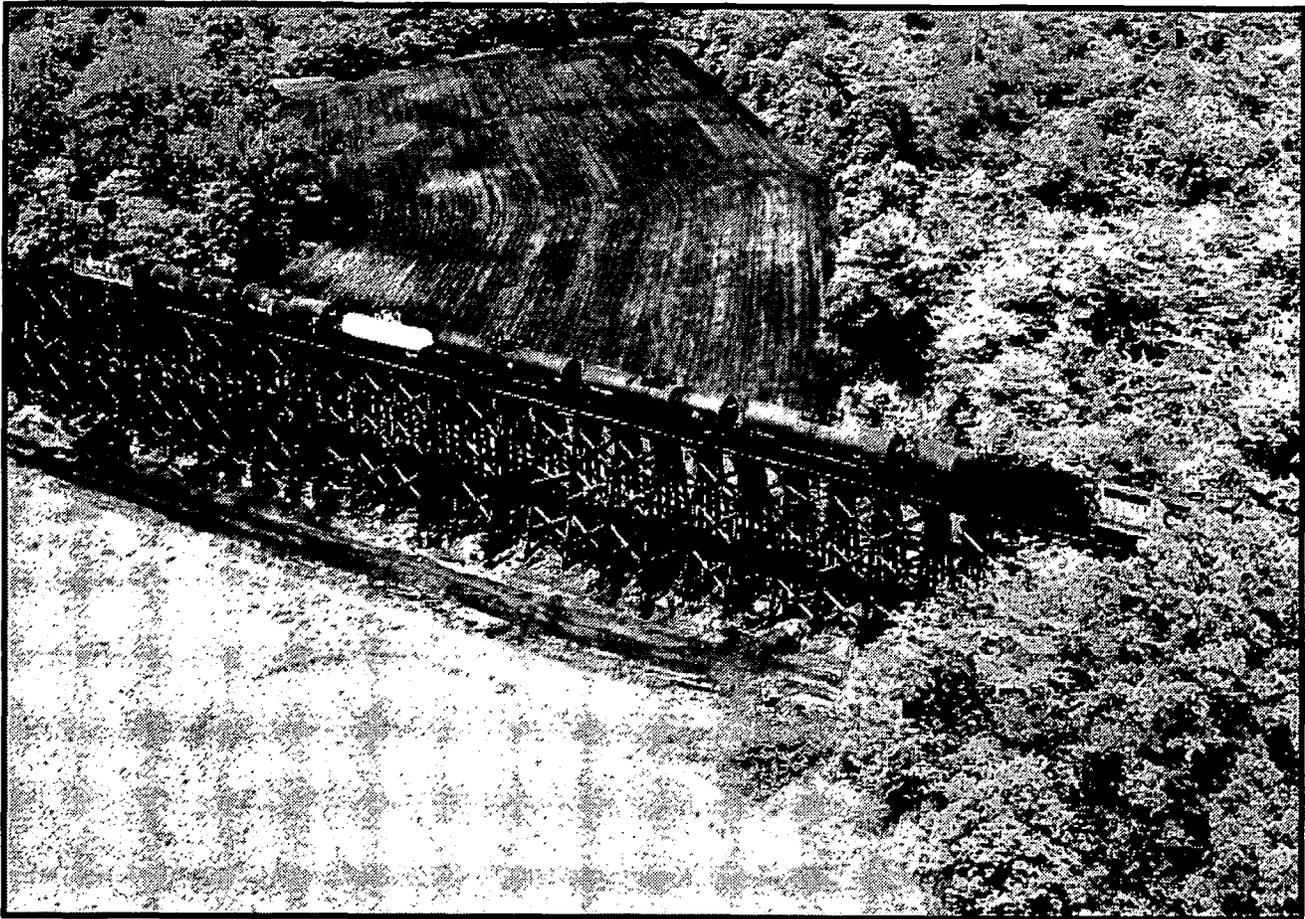
—initiation of substantial continuous on-site remedial action by June 3, 1996, i.e., within 15 months of signing of the Operable Unit 1 record of decision (This milestone has already been met, with work initiating on April 1, 1996.);

— submittal of the Operable Unit 1 transportation and disposal plan by April 30, 1998;

— initiation of operations (i.e., loading of waste which meets the waste acceptance criteria of the permitted commercial disposal facility into railcars) by March 1, 1999; and

— completion of operations (including the above-grade decontamination and dismantlement of the waste pit remediation facilities) by May 31, 2005. These last two enforceable milestones have been incorporated into the schedule for the ARASA subcontractor.

In addition, the remedial action work plan stipulates the ARASA subcontractor's "submittal register" will be provided to U.S. EPA and Ohio EPA within 60 days of the award of the ARASA subcontract and identifies dates for the ARASA subcontractor's remedial design and remedial action deliverables, which will form the basis for establishing additional enforceable milestones.



On April 22, 1997, workers began to upgrade the Okeana Trestle so it will safely support the proposed additional train traffic, which would be new to this branch line, because of the shipment of the Operable Unit 1 wastes (6600-95).

Alternative Remedial Action Subcontracting Approach (ARASA)

In an effort to reduce cleanup costs associated with the remediation of Operable Unit 1, as well as for other reasons, DOE has approved the implementation of ARASA. This approach essentially provides for the ARASA subcontractor to excavate the waste from the Operable Unit 1 waste pits and the surrounding soil, treat it, and load it into railcars, thereby providing Fluor Daniel Fernald and DOE FEMP with a product which meets the waste acceptance criteria of the permitted commercial disposal facility and is ready for shipment to that facility.

The FEMP is currently in the process of procuring the services of a subcontractor to implement the ARASA concept. Proposals were received April 4, 1997, in response to the ARASA Request for Proposal, which was issued Jan. 31, 1997.

After review of these proposals, discussions were held with the offerors May 28 through 30, 1997, to address discrepancies, questions, and clarifications on the proposals. On June 2, 1997, Fluor Daniel Fernald issued a request to the offerors for "Best and Final Offer." On June 17, 1997, Fluor Daniel Fernald received "Best and Final Offers," reviewed them and prepared a consent package for the DOE-FEMP Office.

This "Consent Package," which provides the Fluor Daniel Fernald recommendation for award of the ARASA subcontract, was submitted to DOE for review on July 17, 1997. Award of the ARASA subcontract is planned for September 1997.

The ARASA subcontractor will prepare various remedial design and remedial action planning documents for review by Fluor Daniel Fernald, DOE, and the regulators. Stakeholders will be notified once these documents are at the Public Environmental Information Center (PEIC), 10995 Hamilton-Cleves Highway, Harrison, Ohio. Stakeholders will continue to be informed about Operable Unit 1 cleanup activities.

Operable Unit 1 On- and Off-Site Improvement Activities

Site improvement/preparation activities needed to support remediation facilities (including ARASA) and other activities were initiated April 1, 1996. Initiation of these activities demonstrated the beginning of substantial continuous, on-site remedial action (in accordance with CERCLA) within 15 months of signing the Operable Unit 1 record of decision.

The on-site improvements include various activities which directly support the installation and operation of the remediation facility such as:

- construction of a rail loadout area (with a rail scale); drainage pipe modifications;
- construction of a retaining wall; installation of erosion control;
- site clearing and grading for construction of the waste processing facility;
- and activities required to construct the stormwater management system that will support Operable Unit 1 remediation.

These activities are complete within the area where the ARASA subcontractor's remediation facility will be located. However, work is continuing on the on-site rail enclave and the foundation for the locomotive maintenance building. Completion of all of these on-site improvements is planned for September 1997.

Activities at the FEMP also include construction of an on-site rail system to support the off-site shipment of waste to the permitted commercial disposal facility.

These improvements include:

- modifications to existing rail lines in and around the ARASA subcontractor's work area;
- construction of a railyard to the north of the former Production Area for the storage of empty incoming and full outgoing railcars;
- and other improvements in support of this rail system such as lighting, fencing, and the construction of a locomotive maintenance building.

This work, a majority of which is being performed by Annex Railroad Builders, is scheduled for completion in December 1997.

Infrastructure development activities have also progressed off site in support of the eventual shipment of waste materials to the permitted commercial disposal facility.

Specifically, construction activities were initiated April 22, 1997, for upgrades to the Okeana Trestle, identified by CSXT as needing upgrades to safely support the proposed additional train traffic, which would be new to this branch line, because of the shipment of the Operable Unit 1 wastes.

By early July 1997, the subcontractor, Midwest Foundations, had completed the at/below-grade work necessary to support the steel superstructure improvements.

The subcontractor is currently performing steel fabrication work, and plans on initiating the process of replacing the wooden supports with steel supports sometime in late August 1997. Construction of the trestle upgrades is planned for completion by Oct. 31, 1997.

