

**HANDOUTS FROM THE FEBRUARY 21, 1995, REMEDIAL DESIGN AND
REMEDIAL ACTION PUBLIC WORKSHOP**

02/21/95

**DOE-FN PUBLIC
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HANDOUTS**

REMEDIAL DESIGN



FERNALD

Environmental Management Project

Remedial Design

The U.S. Department of Energy's (DOE) Fernald Environmental Management Project is completing the study and characterization phase of remediation, which includes the selection of final remedies for each of the five site operable units, and has begun the transition to the remedial design phase.

The remedial design phase begins when the U.S. Environmental Protection Agency (U.S. EPA) approves and signs a Record of Decision (ROD), which identifies the selected cleanup remedy for a specific operable unit. The purpose of the remedial design is to assess and develop technical requirements and direction -- based on the selected remedy -- to ensure the remedial action is implemented in a manner that meets the requirements of the ROD. Specifically, the remedial design consists of technical analyses and procedures which result in the development of various design documents.

From project and regulatory perspectives, a series of stages and associated documents comprise the remedial design. These stages include planning the design, as documented in the remedial design work plan; preliminary design; intermediate design (if necessary); prefinal design; and final design. Once the design phase is complete, remedial action begins.

Remedial Design Work Plan

The fundamental objective of the remedial design work plan is to define the design delivery strategy and the associated schedule. At Fernald, the DOE develops a remedial design work plan for each of the site's five operable units as specified in the Amended Consent Agreement. Within 60 days after the ROD for an operable unit is signed by the U.S. EPA, DOE submits a work plan to the regulatory agencies for review.

Generally, the remedial design work plan:

- identifies the overall approach to the design and provides a strategy of how a project might be broken into manageable components (components may include an excavation plan, plans and specifications for a waste processing facility, a backfilling and grading plan, etc.);
- describes what the design documents for those components will consist of during the various phases of design development; and
- provides a schedule for developing and submitting design documents.

What is Remedial Design?

The remedial design establishes the scope of a project and develops the technical requirements for the remedial action. The primary goal of remedial design is to produce a detailed set of engineering plans and specifications which are consistent with the technical criteria established for the design.

Preliminary Design

At about the 30 percent stage of the remedial design process, the preliminary design package will have been developed. At this stage, the pattern and direction for the design process is set for either the entire project or for a component of the project. The preliminary design should provide information to assess the adequacy of the design with respect to all environmental and public health requirements, and the feasibility that the design will meet performance standards.

The preliminary remedial design submittal should include:

- remedial design criteria;
- project delivery strategy;
- results of treatability studies and additional field sampling, as appropriate;
- preliminary plans, drawings, and sketches;
- outline of required specifications;
- a preliminary construction schedule.

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Typically, when DOE submits the preliminary design to U.S. EPA and Ohio EPA for review, the preliminary design will also be made available to the public for inspection. The timing of this design submittal, and of later design stages, relative to public inspection is represented in the figure below.

Comments on the design will be addressed and factored into future design submittals. However, the preliminary design documents will not be revised and resubmitted to the regulators until the 90 percent development stage of the prefinal draft.

Intermediate Design

The intermediate design submittal is expected only for complex designs. When the design is about 60 percent complete, the intermediate design will assess progress of the design, including how comments on the preliminary design have been incorporated into the design. The submittal process will be handled in the same manner as the preliminary design submittal.

Prefinal Design

When the design process is about 90 percent complete, the prefinal design package will have been developed. The prefinal design submittal includes detailed design plans and specifications, as well as any plans necessary to support implementation of the remedial action.

The prefinal design provides the technical direction necessary for implementing the selected remedy, or a component of the remedy, in compliance with all environmental and public health requirements and in a manner which can be readily implemented.

DOE will submit the prefinal design to U.S. EPA for review and approval, and to Ohio EPA for review and concurrence. It will also be made available to the public for inspection. Comments on the prefinal design will be addressed and factored into design documents. DOE will revise the prefinal design documents and submit them to U.S. EPA and Ohio EPA as the final design.

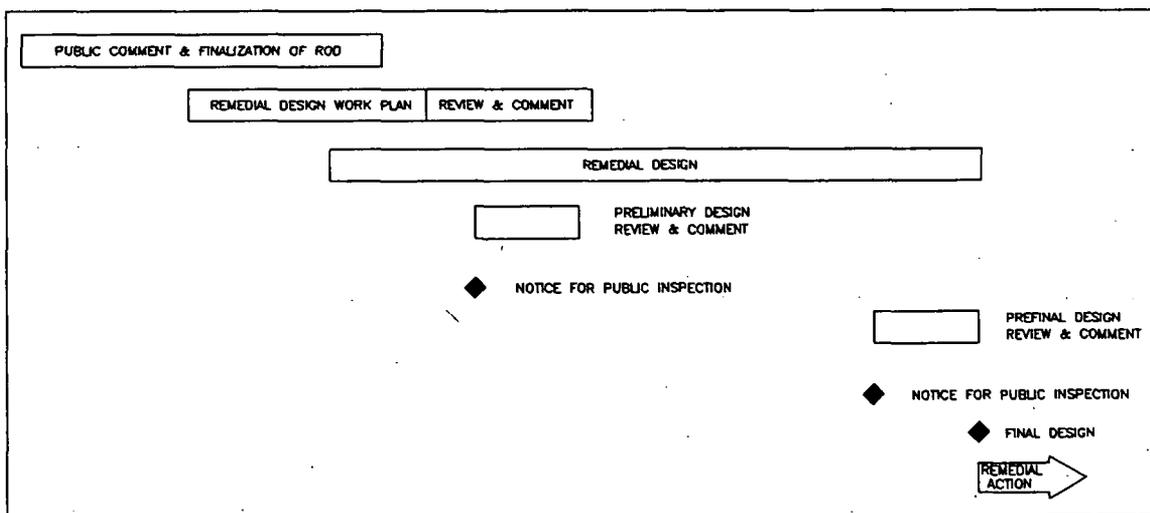
Variations

Based on unique features of a project or component, DOE may propose that the design steps be modified to allow more efficient utilization of time and resources, particularly with respect to document submittals. For example, in Operable Unit 3, which comprises the buildings and structures in the former production area, DOE, U.S. EPA, and Ohio EPA agreed that one design submittal per decontamination and dismantlement project would be sufficient. The submittal would be in the form of an *implementation plan* for each project. Modifications of this sort would be identified in the design delivery strategy within an operable unit's remedial design work plan.

For more information about this topic or other Fernald site activities and issues, contact:

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Fernald Area Office
P.O. Box 538705
Cincinnati, Ohio 45253-8705
513-648-3153*

For an update on Fernald-related public meetings and documents available to the public, call the community access line at 513-648-6272.



REMEDIAL DESIGN AND REMEDIAL ACTION PUBLIC WORKSHOP

FEBRUARY 21, 1995

Evaluation Form

We would like your opinion on the U. S. Department of Energy's (DOE) plans for public involvement during remedial design at the Fernald site. Please complete this evaluation form before leaving.

1. On a scale of 1-10, with "10" being the highest, please rate your current level of understanding of each of the following primary issues discussed at tonight's workshop:

Remedial design and remedial action overview Operable Unit 3 remedial design/action
 Public involvement at Fernald during remedial design

2. Do you feel you learned something by attending this workshop? Yes No

If yes, please briefly summarize what you learned: _____

3. How satisfied were you with responses to questions asked this evening?

Very satisfied Not satisfied
 Satisfied Very dissatisfied
 Somewhat satisfied

Why? _____

4. How did you learn about tonight's meeting?

Newspaper story Friend or neighbor
 Television story Fernald postcard
 Newspaper ad Fernald employee
 Fernald envoy Fernald Community Access Line (513-648-6272)

Other _____

5. Are you aware Fernald cleanup documents are available at the Public Environmental Information Center, 10845 Hamilton-Cleves Road, Harrison (Phone: 513-738-0165)? Yes No

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6. What is your opinion of Fernald management's efforts to provide information about remedial design and remedial actions to the public? _____

7. Please check the subject(s) about which you want more information:

- | | |
|--|--|
| <input type="checkbox"/> Remedial design process | <input type="checkbox"/> Transportation activities |
| <input type="checkbox"/> Waste storage and disposal considerations | <input type="checkbox"/> Federal budget issues impacting Fernald |
| <input type="checkbox"/> Environmental monitoring activities | <input type="checkbox"/> Radon issues |
| <input type="checkbox"/> Groundwater issues | <input type="checkbox"/> Remedial action process |
| <input type="checkbox"/> Public involvement programs | <input type="checkbox"/> Technology programs |
| <input type="checkbox"/> Future use of the Fernald site | <input type="checkbox"/> Safety programs |
| <input type="checkbox"/> Removal action process | <input type="checkbox"/> Other specific projects _____ |

Can you be more specific about the aspects which interest you? _____

8. Please check *all* of the following that apply. I am a(n):

- | | |
|---|--|
| <input type="checkbox"/> Area resident | <input type="checkbox"/> Fernald employee |
| <input type="checkbox"/> Township trustee | <input type="checkbox"/> FRESH member |
| <input type="checkbox"/> Fernald Citizens Task Force member | <input type="checkbox"/> Ohio EPA employee |
| <input type="checkbox"/> U.S. EPA employee | <input type="checkbox"/> Other _____ |

9. If you are not currently on Fernald's mailing list and want to be added, please complete the following:

Name _____
Address _____
City _____
State _____ Zip code _____ Phone _____ Fax _____