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FACT SHEET ON THE OPERABLE UNIT 2 PROPOSED PLAN

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Operable Unit 2 consists of five subunits: the Solid Waste Landfill, the Lime Sludge Ponds, the Inactive Flyash Pile, the South Field, and the Active Flyash Pile. The Feasibility Study for Operable Unit 2 identified four practical alternatives for the remediation of Operable Unit 2. They are:

- Alternative 1 No Action
- Alternative 2 Consolidation and Capping
- Alternative 3 Excavation and Off-Site Disposal
- Alternative 6 Excavation and On-Site Disposal with Off-Site Disposal of the Fraction Exceeding the Waste Acceptance Criteria

The "no action" alternative is required by law to be considered. For Operable Unit 2, no action is not an acceptable cleanup option, so this fact sheet will focus on the "action" alternatives.

In order to choose the preferred remedial alternative, each alternative is evaluated against nine criteria specified by EPA. A brief discussion of the evaluation criteria follows:

Protection of Human Health and the Environment: This is a threshold criteria which must be met in order for an alternative to be considered for the preferred remedial alternative. Long-term modeling (up to 1,000 years) and risk assessment show that all three alternatives are protective of off-site farmers and on-site trespassers.

Compliance with Applicable or Relevant and Appropriate Requirements (ARARs): This is also a threshold criteria. Alternatives 2 and 3 would comply with all ARARs. Alternative 6 would also comply with ARARs with a waiver from EPA for locating an engineered disposal facility over a high-yield sole-source aquifer.

Long-Term Effectiveness and Permanence: Alternative 3 would provide the highest degree of long-term effectiveness, followed by Alternative 6, and then by Alternative 2. Alternative 3 would be effective by removing contaminated material and transporting it off site for disposal. The engineered disposal facility (Alternative 6) would provide a liner system with leachate collection and leak detection layers. Alternative 2 would not involve any liner system, only a capping system to reduce infiltration of water. As compared to Alternative 2, Alternative 6 allows increased flexibility in land use options, a smaller total buffer area (while still maintaining a minimum of 300 feet), and centralized operations and maintenance. All alternatives would include groundwater monitoring at each of the subunits and Alternative 6 would also include groundwater monitoring at the on-site disposal facility.

Reduction of Toxicity, Mobility, or Volume Through Treatment: The reduction of toxicity, mobility, or volume through treatment is considered equivalent for all action alternatives, because the amount of material being treated is minimal in all cases.

Short-Term Effectiveness: Alternative 2 would provide the highest degree of short-term effectiveness, followed by Alternative 6, and then by Alternative 3. Alternative 2 would result in minimal risk for workers or the public because only a small amount of material would be excavated. Alternatives 3 and 6 would excavate the same amount and would result in the same risk (moderate) for workers. However, Alternative 6 would result in less risk to the public than Alternative 3 because of the smaller amounts of waste being transported off site.

Implementability: Alternative 2 would be the most implementable, followed by Alternative 6, and then by Alternative 3. The consolidation of material under Alternative 2 is easily performed and the capping system is readily constructed. As discussed above, Alternative 6 would qualify for a waiver

from EPA to construct an on-site disposal facility over a high-yield sole-source aquifer. Thus, Alternative 6 is administratively implementable while excavation of material and construction of the disposal facility is technically implementable. Off-site disposal under Alternative 3 would be subject to various local, state, and federal requirements. Because there are numerous stakeholders involved in off-site disposal (governments and residents of each state between Fernald and the disposal facility), Alternative 3 would be more difficult to implement.

Cost: Alternative 2 would be the least cost, followed by Alternative 6, and then by Alternative 3.

The final two evaluation criteria, State Acceptance and Community Acceptance will be evaluated after the close of the Operable Unit 2 public comment period, which has been extended to December 30, 1994. Table 1 illustrates the comparison of alternatives.

Based on this evaluation, Alternative 6 was chosen as the preferred remedial alternative. This alternative represents a balanced approach to waste management; the material with high levels of radioactivity would be sent off-site for disposal while the large volumes of material with low levels of radioactivity would be safely managed on site. The citizens of Nevada have been vocal stakeholders in the decisions at Fernald, and have actively participated in reviewing and commenting on Fernald Proposed Plans. They are especially interested in achieving a balance between waste disposal on site and off site. They have filed a law suit against the Nevada Test Site to require them to perform an Environmental Impact Statement before accepting any additional waste from out of state. Alternative 6 attempts to satisfy local stakeholders by sending the most contaminated material off site and attempts to satisfy Nevada stakeholders by safely managing the majority of the Operable Unit 2 material on site.

This fact sheet is a summary of the Operable Unit 2 Proposed Plan which is available at the PEIC, located at 10845 Hamilton-Cleves Highway, Harrison, Ohio and can be reached at (513) 738-0164.

TABLE 1 - COMPARISON OF REMEDIAL ALTERNATIVES

Evaluation Criteria	Alternative 1 No Action	Alternative 2 Consolidation/ Containment	Alternative 3 Off-Site Disposal	Alternative 6 On-Site Disposal
1. Overall Protection of Human Health & Environment	○	●	●	●
2. Compliance with ARARs	○	●	●	●
3. Long-Term Effectiveness and Permanence	○	⊕	●	●
4. Reduction of Toxicity, Mobility, or Volume through Treatment	○	⊕	⊕	⊕
5. Short-Term Effectiveness	●	●	⊕	⊕
6. Implementability	●	●	●	●
7. Total Present Worth Cost (million \$)	0	69.6	212.8	110.3
8. State Acceptance	State acceptance will be evaluated after the public comment period.			
9. Community Acceptance	Community acceptance will be assessed after the public comment period and will be addressed in the Responsiveness Summary of the Record of Decision.			

● = Meets and exceeds criteria

⊕ = Meets criteria

○ = Does not meet criteria