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**PLANT 1 PAD REMOVAL ACTION 7 PHASE E**

10/07/94

DOE-2474-94

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LETTER



**Department of Energy**  
**Fernald Environmental Management Project**  
P. O. Box 398705  
Cincinnati, Ohio 45239-8705  
(513) 648-3155

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OCT 07 1994

DOE-2474-94

Mr. James A. Saric, Remedial Project Director  
U.S. Environmental Protection Agency  
Region V - 5HRE-8J  
77 W. Jackson Boulevard  
Chicago, Illinois 60604-3590

Mr. Tom Schneider, Project Manager  
Ohio Environmental Protection Agency  
401 East 5th Street  
Dayton, Ohio 45402-2086

Dear Mr. Saric and Mr. Schneider:

**CONTRACT DE-AC05-92OR21972, PLANT 1 PAD REMOVAL ACTION 7 PHASE E**

The Department of Energy (DOE) has reevaluated the coating design for the concrete cap being placed on the Phase E area of the Plant 1 Pad as specified in the work plan for Removal Action 7, "Plant 1 Pad Continuing Release." Due to refinements of waste management plans, there was a need to expand the use of the Stage III, Phase E area from the storage of containerized radioactive waste to the storage of surface decontaminated bulk material generated by the dismantling of buildings and structures at the Fernald Environmental Management Project (FEMP). Surface decontamination of the bulk material will occur in accordance with the Interim Record of Decision (IROD) prior to storage on the Phase E area. Information on this matter was provided to you at the August 23, 1994 Environmental Protection Agency (EPA)/DOE Program Manager meeting.

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~~The DOE intends to improve the FEMP's overall flexibility to manage bulk materials, to improve contamination release prevention by installing a coating more suitable for the type of material being considered for storage, and to reduce concrete pad coating maintenance cost through the use of a more durable coating. Therefore, an evaluation of alternative coatings for the Phase E area was conducted.~~

Capping the existing pad with concrete was finished September 30, 1994. Capping the Phase E area completes the objective of Removal Action 7 by preventing the release of chemical and radiological contaminants through the cracked and broken concrete. The concrete cap directs the storm water run-off through the drainage system to the storm water retention basin for settlement and future treatment at the Advanced Waste Water Treatment

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facility. Materials will not be stored on the Phase E area until the new coating has been applied. All other phases of Removal Action 7 (A, B, C, and D) have been completed, establishing low-level and hazardous waste storage areas with impervious coatings.

The FEMP has completed the evaluation of the coating design for the concrete cap being placed on the Phase E area of the Plant 1 Pad for Removal Action 7, "Plant 1 Pad Continuing Release," using the following criteria:

- 1) Imperviousness to chemicals and water.
- 2) Durability - ability to withstand vehicle traffic and bulk loads without losing coating integrity.
- 3) Seam - barrier strength.
- 4) Ability to install coating during cool weather.

The evaluation identified Surtreat® as the preferred coating for the following reasons:

- 1) No other coatings were reviewed that were resistant to chemicals.
- 2) Surtreat® has been used successfully on three other FEMP projects with no apparent problems; Plant 9 Warehouse, Plant 6 Warehouse, and Plant 8 Southwest Annex.
- 3) Surtreat® specifies expansion joint material which enhances seam strength;
- 4) Surtreat® can be applied at cooler temperatures than the other coatings evaluated.
- 5) FERMC0 and A.M. Kinney (Project A/E) reviewed the coating submittals and determined that Surtreat® met all four of the evaluation criteria.

The Phase E area, coated with Surtreat®, will provide protection from releases and permit heavy duty storage activities on the pad without destroying the integrity of the coating. Safety will be enhanced by preventing tears in the coating which would create an uneven surface for the movement of equipment and containers.

As discussed in previous telephone conversations, twelve wells will be abandoned on the Plant 1 Pad - eight in the Phase E area and four in Phases C and D. This is a modification to the approved Removal Action Work Plan (RAWP), which states that the wells will be monitored until final remediation under the Operable Unit 3 (OU3) ROD. These wells are no longer needed for monitoring under the pad because sufficient data exists to fulfill the requirements of the Removal Action Work Plan (RAWP) and the OU5 Remedial Investigation (RI) report. Plugging these wells will eliminate the remaining pathways for contamination from the pad. The wells will be grouted by FEMP Groundwater Programs prior to application of the concrete sealant, preventing potential contamination of the wells. This activity occurred prior to September 30, 1994. The cap will prevent migration of contamination to the media under the pad. Information on this matter was discussed by telephone with the United States Environmental Protection Agency (U.S. EPA) on September 8, 1994, and with the Ohio Environmental Protection Agency (OEPA) on September 9, 1994. The removal action will be completed in late September.

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If you have any questions regarding the Plant 1 Pad coating design or monitoring well abandonment, please contact Art Murphy at (513) 648-3132.

Sincerely,

*Johnny Rensing*  
for Jack R. Craig  
Associate Director  
Environmental Management

FN:Murphy

Enclosure: As Stated

cc w/o enc:

K. H. Chaney, EM-423/QO  
D. R. Kozlowski, EM-423/QO  
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AR Coordinator, FERMCO

\*This was typed by  
mistake.

There are no enclosures  
w/ this letter.



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