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**SCRAP METAL PILES REMOVAL ACTION
NUMBER 15**

06-26-92

**DOE/EPA
DOE-2007-92
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LETTER**



R-026-207.3

Department of Energy
Fernald Environmental Management Project
P.O. Box 398705
Cincinnati, Ohio 45239-8705
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DOE-2007-92

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. Graham E. Mitchell, Project Manager
Ohio Environmental Protection Agency
40 South Main Street
Dayton, Ohio 45402-2086

Dear Mr. Saric and Mr. Mitchell:

SCRAP METAL PILES REMOVAL ACTION NUMBER 15

The purpose of this letter is to transmit the revised pages of the Scrap Metal Piles Removal Action Number 15 Work Plan, and comment responses addressing comments received from the United States Environmental Protection Agency (U.S. EPA) conditional approval of the Work Plan. Enclosure 1 provides the comment responses addressing the final comments received from the U.S. EPA. Enclosure 2 provides the revised pages reflecting incorporation of the U.S. EPA comments and satisfies the requirements for Work Plan approval. Please replace the April 1992 version of the revised pages in the subject document.

If you or your staff have any questions or comments, please contact Robert Janke at FTS/Commercial (513) 738-6883.

Sincerely,



Jack R. Craig
Fernald Remedial Action
Project Manager

FN:Janke

Enclosures: As Stated

cc w/enc.:

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cc w/o enc.:

D. J. Carr, WEMCO
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ENCLOSURE 2

SCRAP METAL PILE REMOVAL ACTION NUMBER 15 WORK PLAN

(Replace pages 4 and 5 with revised pages 4 & 5)

The facility is a 1,050 acre parcel located in southwestern Ohio. In November, 1989, the FEMP was placed on the CERCLA National Priorities List (NPL) as a result of concerns related to past and potential releases of hazardous substances to the environment. Consistent with Section 120 of CERCLA, the DOE and U.S. EPA jointly signed a Consent Agreement in March, 1990 establishing a schedule for the implementation of a sitewide RI/FS and a series of removal actions at the FEMP. This agreement was amended in September, 1991. This removal action work plan has been developed consistent with the terms of the Amended Consent Agreement.

1.2 BACKGROUND OF THE SCRAP METAL PILES

The low-level radioactively contaminated scrap metal pile is currently located on the B69 Pad and the scrap copper pile is currently located on the Plant 1 Pad. All of the scrap metal was generated at the FEMP as a result of demolition projects, removal of abandoned equipment, and the upgrade of facilities and vehicles. The copper was generated from the Cascade Improvements/Cascade Upgrades Project at the DOE Gaseous Diffusion plant at Paducah, Kentucky and was initially sent to the FEMP for shredding and casting. The copper casting operations were abandoned due to unavailable options for the disposition of the resulting copper ingots with the given uranium concentrations. Uranium concentrations within copper ingots casted from this material source were estimated to be a maximum of 70 pCi/g.

As previously mentioned, the scrap metal on the B69 Pad was segregated into recoverable and refuse scrap metal under the Radioactively Contaminated Metal Segregation Project. The recoverable scrap metal was further segregated into ferrous and non-ferrous and within each of these categories, they were again segregated into high-count and low-count. The following are the guidelines established under the Radioactively Contaminated Metal Segregation Project and will be used as definitions for reference throughout this work plan. An alpha scintillator detector was used to measure contamination levels on the scrap metal. The active window area of the probe is 59 cm² and all alpha scintillator detectors at the FEMP are calibrated using thorium-232 sources which mimics the energy level of uranium. Disintegrations per minute (dpm) are used because the predominant isotopes are uranium and thorium.

RECOVERABLE METAL

Recoverable metal is any metal that is greater than or equal to 1/4-inch thick and requires only minimal processing prior to being made available for beneficial re-use or unrestricted release (I-beams, plate steel, and structural components).

FERROUS METAL

Ferrous metal consists of scrap carbon steel.

NON-FERROUS METAL

Non-ferrous metal within the inventory is generally stainless steel and aluminum.

HIGH-COUNT SCRAP METAL

Recoverable scrap metal with gross fixed alpha contamination greater than 200,000 disintegrations per minute (dpm)/window area. The 200,000 dpm/window area level was the FEMP Radioactively Contaminated Metal Segregation Project segregation criterion defining the "high count" and "low count" categories, not a level allowing release for unrestricted use.

LOW-COUNT SCRAP METAL

Recoverable scrap metal with gross fixed alpha contamination less than 200,000 (dpm)/window area. The 200,000 dpm/window area level was the FEMP Radioactively Contaminated Metal Segregation Project segregation criterion defining the "high count" and "low count" categories, not a level allowing release for unrestricted use.

REFUSE METAL

Refuse metal is any metal that is less than 1/4-inch thick, is wrapped with non-metallic material (except copper), or material generally requiring extensive efforts to render it available for recovery (a field decision will be employed for this determination). Generally, refuse metal is comprised of thin gauge material, wire, conduit, and piping. Disposal of refuse metal is being addressed via Removal Action No. 9 - Removal of Waste Inventories, Part 1 - Low-Level Waste Management. It is anticipated, based on current shipping schedules, that the scrap metal refuse will be removed from the B69 Pad by June of 1992.

The inventory of scrap metal and scrap copper within the scope of this work plan consists of:

- 238 tons of high-count recoverable ferrous metal
- 2843 tons of low-count recoverable ferrous metal
- 54 tons of high-count recoverable non-ferrous metal
- 139 tons of low-count recoverable non-ferrous metal
- 1370 tons of copper

Even though the refuse was segregated from these scrap metal piles in 1987, with approximately 2400 tons of refuse segregated, the possibility of discovering more refuse metal during the removal action exists. The estimated percentage of non-recoverable metals and other materials anticipated to be encountered during this removal action is less than 10% by volume. Refuse metal segregated during the processing of the scrap metal within the scope of this removal action will be managed in accordance with guidelines established for Removal Action No. 9 - Removal of Waste Inventories, Part I - Current Low-Level Waste Management.

Newly generated scrap metal will be handled under Removal Action No. 17 - Improved Storage of Soil and Debris. Therefore, no additional scrap metal will be added to the recoverable scrap metal piles within the scope of this removal action.