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**ADDENDUM TO THE RI/FS COMMUNITY RELATIONS PLAN FOR
REMOVAL ACTION NO. 10 - ACTIVE FLYASH PILE CONTROLS**

08/01/92

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TO THE
RI/FS COMMUNITY RELATIONS PLAN
FOR REMOVAL ACTION No. 10
ACTIVE FLYASH PILE CONTROLS

Fernald Environmental Management Project
Fernald, Ohio

U.S. Department of Energy
Fernald Office

August 1992

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LIST OF ACRONYMS

CERCLA:	Comprehensive Environmental Response, Compensation, and Liability Act [of 1980] (also known as Superfund)
CRP:	Community Relations Plan
DOE:	U.S. Department of Energy
EPA:	U.S. Environmental Protection Agency
FEMP:	Fernald Environmental Management Project (formerly the Feed Materials Production Center)
FFCA:	Federal Facility Compliance Agreement
NCP:	National Oil and Hazardous Substances Pollution Contingency Plan [of 1990]
RI/FS:	remedial investigation and feasibility study
SARA:	Superfund Amendments and Reauthorization Act [of 1986]

Introduction

This document was prepared as an addendum to the Fernald Environmental Management Project (FEMP) Remedial Investigation and Feasibility Study (RI/FS) Community Relations Plan (CRP), dated August 1990. This addendum addresses Removal Action No. 10, Active Flyash Pile Controls.

This removal action is being conducted pursuant to the laws, regulations and agreements listed below, and will comply with the provisions of each:

- The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), also known as Superfund, that provides for the investigation and cleanup of uncontrolled hazardous waste sites
- The Superfund Amendments and Reauthorization Act of 1986 (SARA) that renewed and updated CERCLA
- The National Oil and Hazardous Substances Pollution Contingency Plan of 1990 (NCP) that spells out how CERCLA and SARA legislation will be implemented
- The Federal Facility Compliance Agreement of 1986 (FFCA) between the U.S. Department of Energy (DOE) and the U.S. Environmental Protection Agency (EPA) that provides for the investigation and cleanup of environmental impacts from past and present activities at the FEMP
- The Consent Agreement of 1990 that amended the FFCA and fostered consistency among the operable unit concept and the current commitments of the RI/FS program without modifying the underlying objectives
- The Amended Consent Agreement of 1991 that establishes definitions and schedules for completion of RI/FS documents for the five operable units and identifies additional specific removal actions at the FEMP

The 1990 Consent Agreement specified four removal actions and provided for the identification of three more; these seven are now referred to as the Phase One Removal Actions. The Amended Consent Agreement for the FEMP, signed on September 20 and effective on December 19, 1991, specified 11 additional removal actions, referred to as Phase Two Removal Actions.

On January 14, 1992 six more removal actions, known as Phase Three Removal Actions, were approved by EPA and three emergency removal actions were initiated. In all, the three phases total 27 separate, sequentially numbered removal actions. DOE may identify additional removal actions each year by January 15, if needed.

Objectives

The objective of removal actions under CERCLA and the NCP is to "...take appropriate action to abate, stabilize, mitigate, or eliminate the release or threat of release..." of hazardous materials or waste in a manner that reduces or eliminates the threat to public health, welfare or the environment. Removal actions are emergency or short-term responses to immediate threats. They differ from remedial actions in that they are generally more limited in scope and cost.

Removal actions can be divided into three general categories: emergency, time critical, and non-time-critical. They are as follows:

- Emergency removal actions call for an immediate response. An Administrative Record file must be established and affected citizens must be notified.
- Time-critical removal actions have a planning period of less than six months. If on-site actions are expected to extend beyond 120 days, then an addendum to the CRP is required based on interviews with community residents and/or public interest groups to identify their concerns and determine ways in which residents would like to become involved.
- Non-time-critical removal actions usually have a planning period of at least six months and dictate the same community relations activities as discussed above. An added requirement is the preparation of an engineering evaluation/cost analysis (EE/CA). In this case, the addendum to the CRP must be completed before the EE/CA approval memorandum is signed.

The specific objective of Removal Action No. 10, Active Flyash Pile Controls, a time-critical removal action, is to significantly mitigate the wind and water erosion of the existing active flyash pile at the FEMP site. This will be accomplished by implementing the following activities: (1) installation of a silt trap made from permeable geotextile fabric around the toe of the ash pile; (2) installation of a wind barrier made from high density polyethylene around the top perimeter of the ash pile; (3) alteration of the active working surface to minimize the noncompacted area and to prevent increase in the maximum height of the existing pile; (4) minor regrading of the outer berm and compacting the nonworking top surfaces of the ash pile; (5) application of water and foam and binding type dust-control agents on side slopes and

top; and (6) providing periodic routine inspection and necessary maintenance identified during inspection. A combination of methods is necessary as no one method addresses all concerns of the removal action.

As the Active Flyash Pile Controls Removal Action is implemented, the active flyash pile will be partitioned into an inactive area where no additional ash will be deposited and no additional grading will be performed, and an active working area where future ash will be deposited. The active and inactive areas will change as the ash pile is built up. Regrading and compaction of the active working area will be conducted periodically. Water and dust control agents will be applied in conjunction with regrading and compaction activities.

Background

The active flyash pile is one of the subunits included in Operable Unit 2 for final remediation at the FEMP under CERCLA. It is located approximately 3000 feet southwest of the FEMP's former production area, and just east of the South Field, another subunit of Operable Unit 2.

The active flyash pile has been receiving coal ash since the mid-1960s when two coal-fired boilers were put in use for steam production at the FEMP. The steam was a source for heating, laundry facility operations, uranium metal production, and minor miscellaneous uses. Uranium metal production at the FEMP was informally suspended by WEMCO and DOE for environmental reasons in July 1989 and was officially ended by DOE in July 1991. Coal combustion generates approximately seven tons of ash waste per day during fall and winter and approximately three tons of ash waste per day during spring and summer. Ash waste consists of 70 percent bottom ash (collected below the boilers) and 30 percent precipitator ash (collected from pollution control devices) and flyash (removed from the middle levels of the boiler).

The active flyash pile is estimated to contain approximately 59,000 cubic yards of flyash and has a surface area of about three to four acres. It has never been covered and surface vegetation is negligible. The pile depth ranges from three to 40 feet. Flyash from the FEMP is transported to the active flyash pile several times a week. Currently, water and a dust-control agent are added at the time the ash is loaded into the truck for transport to the ash pile. The removal action will continue this practice.

The working surface of the ash pile gently slopes from the east and the south down to the north while the sides slope steeply at a natural angle of repose in the western and southern edges. Since July 1991, the ash pile has been watered down as needed and historically graded approximately every three months to maintain a level working surface.

The characterization of the active flyash pile is based on two studies (Weston 1987; DOE 1988). Samples have been analyzed for barium and chromium, volatile organics, and radionuclides in composite ash samples (DOE 1991). Based on these previous investigations, the flyash from the active flyash pile is assumed to be nontoxic and nonhazardous and to contain radionuclides below unrestricted release values. Flyash, as defined in the Ohio Environmental Protection Agency Policy Number 4.07, is considered to be nontoxic if its leachate does not exceed 30 times Ohio Drinking Water Standards. Pursuant to Ohio Administrative Code 3745-27-02, nontoxic flyash is not regarded as solid waste.

In July 1991, after a period of hot and dry weather and recent grading of the pile, high wind conditions produced a large fugitive ash cloud that was visible off the FEMP property. Two inspections of the active flyash pile made in September 1991 revealed small amounts of ash (less than one inch thick) in the grass within 20 feet of the base of the pile and a light dusting on vegetation around the pile. Signs of mild scouring from runoff water were also visible on the south and west slopes of the pile.

In 1988, water samples were collected from both the storm sewer outfall ditch (located directly east of the pile) and a drainage ditch (located west of the pile) as part of the Best Management Plan Sampling Program. The samples indicated elevated levels of heavy metals and total suspended solids. These elevated levels may be attributed to ash pile runoff. A review of the 1987 water sample analysis by Roy F. Weston, Inc. indicates a possible migration of heavy metals into the natural stream as a result of the ash pile runoff.

In summary, there are two potential threats from the active flyash pile that necessitate Removal Action No. 10. First, fugitive dust carried by wind, and second, possible migration of contaminants via storm water runoff. Since this removal action is only an interim step prior to final remediation under CERCLA, the active flyash pile will continue to receive ash as required to support boiler plant operations.

Overview of Community Concerns

In preparing this addendum, transcripts of community meetings held on: January 31, 1989; May 15, 1989; October 24, 1989; February 20, 1990; May 22, 1990; September 25, 1990; December 11, 1990; March 19, 1991; July 16, 1991; and October 29, 1991 were reviewed. Also reviewed were transcripts from the RI/FS Environmental Impact Statement scoping meetings held on June 12 and 13, 1990.

The community voiced its concern about flyash at the July 16, 1991 community meeting. Earlier that month, the incident of the fugitive ash cloud, mentioned above, had occurred. One community member testified at the July community meeting that she witnessed the incident and was concerned about the possibility of the flyash containing uranium and being blown around a public road and a house directly across from the location of the flyash piles.

In order to better determine the community's concerns about this planned removal action and to maintain open communication with the community, telephone interviews were conducted with community members who have expressed an interest in the FEMP in the past. The interviews were conducted to conform with CERCLA guidance and to respond to community members' concern that their opinions have not been solicited prior to the planning and implementation of remedial activity.

Some local residents interviewed indicated that they were not aware of the active flyash pile at the FEMP and were not informed on flyash in general, but were concerned about their personal health and how they might be effected living so close to the FEMP. One community member contacted, who was knowledgeable about flyash, was concerned about dried-out flyash being blown into the air by wind gusts. He was concerned that the flyash might be contaminated with radioactive and/or hazardous wastes.

A 45-day public comment period for Active Flyash Pile Controls, Removal Action No. 10, was held from May 27 - July 11, 1992. The announcement ran in three local newspapers. There were no oral or written comments submitted.

Highlights of Community Relations Activities

Community concerns regarding the Active Flyash Pile Removal Action suggest an active FEMP community relations effort with the following objective:

- Maintain an active effort to keep interested community members informed throughout the implementation of the Active Flyash Pile Removal Action.

The following specific activities have been identified to support the community relations objective for this removal action:

1. Prepare one or more fact sheets or updates for the purpose of providing information about the removal action and answering key concerns about the flyash piles at the FEMP and distribute them at the quarterly public meetings.
2. Devote some portion of a community meeting to this issue; update the RI/FS exhibit to include new information as it becomes available. (Community meetings are held at regular intervals on dates selected by DOE.)
3. Include coverage about the Active Flyash Pile Controls Removal Action in the next issue of the Fernald Project Cleanup Report.

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4. Offer a roundtable presentation on the removal action.
5. Provide a 24-hour phone line at the FEMP so concerned citizens can contact a FEMP representative during a time of alarm. The number is 513-738-6295, which is FEMP Security.
6. Make appropriate additions to the Administrative Record and publicize their availability at the Public Environmental Information Center, JAMTEK Building, 10845 Hamilton-Cleves Highway, Harrison, Ohio, 45030.

Timetable

The preparation of materials for all community relations activities will be tied to the removal action schedules. For a complete list of schedule dates and activities, please see the Active Flyash Pile Controls Work Plan, which is in the Administrative Record, located at the PEIC. Since the removal action is in multiple phases, these activities will be scheduled to provide the maximum flexibility and information to the public. The work plans for this removal action have been submitted to EPA.

Discussions and updates on the status of the removal action will be given at future public meetings.

REFERENCES

1. U.S. Department of Energy, 1988, "FMPC Sampling and Analysis Report," 2 vols., Draft, DOE, Oak Ridge Operations Office, Oak Ridge, TN.
2. U.S. Department of Energy, 1991, "Removal Site Evaluation - Active Flyash Pile Controls," Fernald Environmental Management Project, DOE Fernald Office, Cincinnati, OH.
3. Weston, Roy F. Inc., 1987, "Characterization Investigation Study, Volume 2: Chemical and Radiological Analyses of the Waste Storage Pits," FMPC/SUB008, prepared for Westinghouse Materials Co. of Ohio, Cincinnati, OH.

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