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**ADDENDUM TO THE RI/FS COMMUNITY RELATIONS PLAN FOR
REMOVAL ACTION NO. 19 - PLANT 7 DISMANTLING - DECEMBER
1993**

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TO THE
RI/FS COMMUNITY RELATIONS PLAN
FOR REMOVAL ACTION No. 19

Plant 7 Dismantling

Fernald Environmental Management Project
Fernald, Ohio

U.S. Department of Energy
Fernald Field Office

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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
EE/CA:	engineering evaluation/cost analysis
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 is prepared as an addendum to the Fernald Environmental Management Project (FEMP) Remedial Investigation and Feasibility Study (RI/FS) Community Relations Plan (CRP), dated August 1992. This addendum addresses Removal Action No. 19, Plant 7 Dismantling.

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 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 I 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 II Removal Actions.

On January 14, 1992 six more removal actions, known as Phase III Removal Actions, were approved by EPA and three emergency removal actions were initiated. On January 14, 1993 three more removal actions, known as Phase IV Removal Actions, were approved by EPA; however, in May 1993 DOE requested that two of the original Phase IV Removal Actions be eliminated and one removal action recently initiated, be added. EPA approved this recommendation and the four phases now total 29 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 removal 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.

Removal Action No. 19, Plant 7 Dismantling, includes the characterization, decontamination, removal, containerization and disposition of materials in Plant 7, as well as the decontamination and dismantling of the building down to the concrete slab. This includes:

- 1) the structural steel and equipment;
- 2) associated piping;
- 3) asbestos containing materials;
- 4) heating, ventilation, and air conditioning ductwork;
- 5) electrical equipment and substations;
- 6) above-grade level concrete.

The primary objective of Removal Action No. 19 is to eliminate the potential threat of additional contaminant releases and the safety hazard due to histoplasmosis and radiological contamination from Plant 7. In addition, the removal action will contribute to the long-term remedial actions proposed for the Fernald site.

All preparatory work and dismantling activities will be conducted within a controlled environment to prevent the spread of contamination. Some work areas will be isolated with critical barriers and a ventilated containment system. The ventilated air will be filtered through pre-filters and High Efficiency Particulate Air (HEPA) filters. Fernald standards for worker safety will be observed throughout the project. A task-specific health and safety plan will supplement the formal Health and Safety Program for the Fernald site.

The waste streams identified below will be shipped to the Nevada Test Site for burial or for storage pending results of treatability studies within 90 days of exiting the Plant 7 control zone:

Structural Steel: Recoverable structural steel will be segregated for the purpose of beneficial reuse/recycling. Preliminary estimates indicate Plant 7 contains approximately 1,468,000 pounds of structural steel.

Miscellaneous Steel: These materials will be packaged for shipment to the Nevada Test Site. However, some of this steel will be separated for use in treatability studies.

Ductwork, Pipe, Conduit, Equipment, and Concrete: These materials will be packaged for shipment to the Nevada Test Site.

Asbestos Containing Material/Transite: The asbestos containing material and transite will be packaged and placed in storage pending acceptance at a licensed disposal site. Preliminary estimates indicate Plant 7 contains approximately 665,000 pounds of transite.

Lead Flashing, Sheet Lead, and Lead Caps: These materials will be segregated during the dismantling process and will be investigated for reuse and recycling.

As the various materials are disassembled, they will be packaged in accordance with site procedures as well Department of Transportation regulations. A portion of these materials (e.g., concrete, miscellaneous steel, and transite) will be segregated for use in bench-scale treatability studies which will be detailed in the Treatability Studies for the Remedial Action/Feasibility Study (RI/FS). These bench-scale studies will form the Plant 7 demonstration project. One of the goals of the demonstration project will be to determine the feasibility of decontaminating various materials to levels that meet the free release criteria identified in site procedures. Under the Plant 7 demonstration project, various decontamination techniques will be evaluated, utilized, and documented. The results of this project, in concert with the bench-scale studies and the Feasibility Study to be performed later, will assist in determining disposition options for future remediation projects at the Fernald site.

Background

Plant 7 was constructed in the southeast quadrant of the Fernald site in May 1953 to house the processes involved in the reduction of uranium hexafluoride (UF_6) to uranium tetrafluoride (UF_4). The Plant 7 "Hexafluoride Reduction Plant" was designed to an established production rate converting 12 tons of UF_6 to UF_4 per 24-hour period. Plant 7 has been idle since 1956 when its production processes were halted.

In 1967, the uranium hexafluoride reduction process was declared obsolete, and the majority of the equipment and process piping were dismantled and removed. The ammonia separation process and several motor control centers were abandoned in place. In 1975, all utilities were disconnected at the exterior wall of the building and capped, except the substation which has been retained and currently provides service to two adjacent buildings.

Plant 7 has been used in past years to store drums of intermediate product (uranium tetrafluoride) on the first and second floors, and empty five-gallon containers on the third, fourth, and sixth floors. The five-gallon containers were purchased to hold uranium tetrafluoride but were never used.

The use of Plant 7 to store low-level radioactive materials, as well as the result of previous process operations, were considered in recommending the removal of this building. The building was found to contain asbestos containing materials (e.g., transite panels, thermal insulation, fire brick, and floor tile); biological hazards in the form of bird droppings on the seventh floor; and chemical hazards, such as UF_6 , UF_4 , uranium dioxide (UO_2), uranyl fluoride (UO_2F_2), aqueous and anhydrous hydrofluoric acid (HF), ammonia, and nickel.

Prior to dismantling activities, all stored materials and debris have been relocated as part of the Safe Shutdown Program, Removal Action No. 12, to alternate storage areas on site. In addition, asbestos abatement work and gross decontamination (high-pressure water wash) of the interior building have been completed. Future activities include the award of the subcontract to dismantle the building. Plant 7's dimensions are approximately 80 feet x 110 feet x 110 feet high (7 stories). The outside wall is a single layer of transite (an asbestos containing material) siding secured with steel pins and lead caps. The roof is constructed with a double layer of transite panels. Interior walls are composed of flat transite. A mineral fiber batting insulation exists between the interior and exterior transite walls and roof.

The first and second floors contain vacant offices and labs located along the exterior walls. The walls for these rooms are also transite. There is an opening near the center of the building in a shaft configuration from the concrete slab to the fifth floor. The sixth and seventh floors have removable floor plates covering the shaft opening. The balance of each floor is an open bay arrangement. The first floor is a concrete slab, which will remain intact. The floor composition on levels two through seven is primarily steel plate supported by structural steel.

About 15 feet to the north of Plant 7 is the Plant 4 Maintenance Shop. The Plant 4 Warehouse is located about 40 feet to the east of Plant 7. This warehouse currently stores drums of uranium tetrafluoride. As a result of the proximity, the increased background activity interferes with direct in-place radiological measurements (beta-gamma). However, direct reading field instruments will be used within Plant 7. If the background activity interferes with the sampling, then shielded probes will be utilized. To the south is an open area covered with gravel providing access to First Street. A concrete pad borders the west side of Plant 7, which contains the overhead crane with rail siding and a fence restricting access from "B" Street.

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; October 29, 1991; February 25, 1992; July 21, 1992; November 9, 1992; February 23, 1993; and June 22, 1993 were reviewed. Also reviewed were transcripts from the RI/FS Environmental Impact Statement scoping meetings held on June 12 and 13, 1990.

A 30-day public comment period for the Plant 7 Dismantling Removal Action was held from June 9, 1993 to July 9, 1993. The announcement ran in three local newspapers. There were no oral or written comments submitted.

Highlights of Community Relations Activities

Community concerns regarding the Plant 7 Dismantling 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 Plant 7 Dismantling 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 dismantling of Plant 7 at the FEMP and distribute them at the public meetings.
2. Devote some portion of future community meetings 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 Plant 7 Dismantling Removal Action in the Fernald Project Cleanup Report as needed during the removal action.
4. Offer a roundtable presentation on the dismantling of Plant 7.
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 Plant 7 Dismantling Work Plan, which is in the Administrative Record, located at the Public Environmental Information Center. The activities will be scheduled to provide the maximum flexibility and information to the public. The work plan for this removal action has been approved by EPA. Discussions and updates on the status of the removal action will be given at future public meetings.

REFERENCES

1. (the work plan and any other documents used for information)