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**CATEGORICAL EXCLUSION (CS)
DETERMINATION CLOSURE OF DRUMMED
HYDROFLUORIC ACID (HF) RESIDUE STORAGE,
INSIDE OF PLANT 4 NEPA DOC. NO 418**

DOE-FN/DOE-HQ

3

CAT EXC

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)**CATEGORICAL EXCLUSION (CX) DETERMINATION**

**Closure of Drummed Hydrofluoric Acid (HF) Residue Storage, Inside of Plant 4
NEPA Document No. 418
Fernald Environmental Management Project (FEMP)
Fernald, Ohio**

Proposed Action

The United States Department of Energy (DOE) proposes a closure of the Drummed Hydrofluoric Acid (HF) Residue Storage Hazardous Waste Management Unit (HWMU No. 6) inside Plant 4.

Location

The proposed action will take place in Plant 4, which is surrounded by C Street on the east, B Street on the west, 2nd Street on the north, and Plant 7 on the south. HWMU No. 6 is in the northwest quadrant of Plant 4 on the first level. The 1050 acre FEMP site is located 18 miles northwest of downtown Cincinnati, Ohio.

Background

HWMU No. 6 measures four feet wide by seventeen feet long. It was previously used to store nineteen 55-gallon drums of anhydrous hydrofluoric acid (AHF) residues generated from the emptying and cleaning the HF storage tanks in the Tank Farm. The residues consisted of liquid AHF, lime, and sludge. The lime had been added to the tank to absorb any free liquids remaining after the AHF had been removed, and to neutralize any remaining AHF. The sludge consisted of rust, scale, and AHF residues.

The drums were moved to what is now HWMU No. 6, located on level one of the northwest quadrant of Plant 4. They were stored in the area for more than ninety days and determined to contain Resource Conservation and Recovery Act (RCRA) waste. The drums have been moved to the Plant 1 Pad for storage until waste characterization can be made to determine final disposition.

Description of Proposed Action

The proposed action involves the closure of HWMU No. 6 which would entail clearing the floor surface, constructing a dike, washing the floor, and sampling and analysis of the wash rinseate. These actions are discussed below in more detail.

First, the floor surface of HWMU No. 6 would be cleared of any loose debris by a vacuum device. The vacuum would be fitted with a high efficiency particulate (HEPA) filter to control the release of any particulates. The residue removed from the vacuum would be drummed and managed as hazardous waste pending waste

**Closure of Drummed HF Storage,
Inside of Plant 4**

2

characterization. The floor surface would then be examined to search for any cracks exceeding an eighth of an inch in width or any expansion joints with loose sealing material. These would be filled with expanding cement grout that would need to set for at least 96 hours to cure and harden, prior to washing.

Next, an impervious temporary wooden dike would be constructed around the boundaries of the HWMU to collect the wash water generated from the cleaning of the floor. The dikes would be covered with a double layer of polyethylene or other suitable sheeting and secured with sand bags or another form of stabilization. Water collected inside the diked area would be pumped into labeled 55-gallon drums. These drums will be stored in an approved RCRA hazardous waste storage location until waste characterization and determination can be made in accordance with the approved FEMP Analysis and Waste Determination Plans.

A power washer would be used to wash the floor of HWMU No. 6. The power washer would use a regulated pressure between 0 and 10,000 p.s.i. The project engineer will determine if it is necessary to use a non-phosphate laboratory detergent in the power wash. After the wash, the floor surface would then be rinsed with tap water to remove any visible wash residues. The power wash and the rinsing constitutes one wash cycle. Each cycle is expected to generate 120 gallons of wash water. The project engineer would determine whether to use another wash cycle or to collect a decontamination verification rinse sample from the floor surface. If sampling is selected, any waste water remaining would be removed from the floor surface by a vacuum. The rinse sample would be taken from a clean tap water rinse and then field tested for pH using Method 9040 of the U. S. Environmental Protection Agency's (EPA) "Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846).

HWMU No. 6 would be considered clean for Resource Conservation and Recovery Act (RCRA) closure if the wash water samples demonstrate that the concentrations of the hazardous constituents and pH are less than the Cleanup Action Levels (CALs) listed in Table 1 of the Closure Plan Information and Data (CPID) for HWMU No. 6. If satisfactory decontamination is not achieved by the first wash cycle, it can be repeated up to three more times. If HWMU is still not considered clean, the CPID would be revised to reflect a new plan to deal with the contamination. All wastes generated or collected (i.e., wash water, sampling equipment, and polyethylene sheeting) during closure of HWMU No. 6 would be managed and disposed of according to all applicable radiological, hazardous and solid waste rules and regulations. The closure of HWMU No. 6 is expected to take no more than 180 days to complete.

Categorical Exclusion to be Applied

The authority for finding this project to be subject to NEPA Categorical Exclusion is contained in Subpart D of the revision to 10 CFR 1021, entitled "National Environmental Policy Act Implementing Procedures and Guidelines." The Final Rule and Notice, effective May 26, 1992, includes a list of categorical exclusions that are classes of actions that normally do not require the preparation of either an Environmental Impact Statement or an Environmental Assessment.

**Closure of Drummed HF Storage,
Inside of Plant 4**

3

The Final Rule and Notice specifically lists in Part 1021, Appendix B to Subpart D, Sec. 1021.410, B6.1 (1) the following as types of actions that are Categorical Exclusions applicable to Specific Agency Actions:

B6.1 Removal actions under CERCLA (including those taken as final response actions and those taken before remedial action) and removal-type actions similar in scope under RCRA and other authorities (including those taken as partial closure actions and those taken before corrective action), including treatment (e.g., incineration), recovery, storage, or disposal of wastes at existing facilities currently handling the type of waste involved in the removal action. These actions will meet the CERCLA regulatory cost and time limits or satisfy either of the two regulatory exemptions from those cost and time limits (National Contingency Plan, 40 CFR part 300). These actions include, but are not limited to:

(1) Use of chemicals and other materials to retard the spread of the release or to mitigate its effects if the use of such chemicals would reduce the spread of, or direct contact with the contamination.

This Categorical Exclusion is appropriate since the proposed action as described is a closure of HWMU No. 6. The proposed action consists of the use of a power wash and rinse that would be used to retard the spread of contamination.

The proposed action will not violate applicable statutory, regulatory, or permit requirements; it will not require siting and construction nor major expansion of waste disposal, recovery or treatment facilities. The proposed actions will have no significant adverse impact on any environmentally sensitive areas (e.g., wetlands, floodplains, critical habitats, or the sole-source aquifer).

Compliance Action

I have determined that the proposed action meets the requirements for the CX referenced. Therefore, the proposed action is categorically excluded from further NEPA review and documentation.

Approval:

Ray Rowland for

 Thomas J. Rowland, Acting Manager
 U.S. Department of Energy, Fernald Office

Date:

May 6, 1993
