

**4462**

**CATEGORICAL EXCLUSION (CX)  
DETERMINATION SILO 3 REMOVAL ACTION  
NEPA DOCUMENT 369**

**03/03/92**

**NEPA DOC. 369**

**DOE/DOE**

**5**

**CAT EX**

**OU4**

CATEGORICAL EXCLUSION DETERMINATION  
Silo 3 Removal Action  
(FEMP NEPA Document No. 369)  
Fernald Environmental Management Project, Fernald, Ohio

Proposed Action

The U.S. Department of Energy proposes the removal and demolition of the Silo 3 dust collector at the Fernald Environmental Management Project (FEMP).

Location

Silo 3 is located immediately west of the FEMP Process Area and south of the waste pit area. The FEMP Process Area is located near the center of the 1050 acre site. The FEMP site is located 20 miles northwest of downtown Cincinnati.

Background

During preparation of the Best Management Practice (BMP) Work Plan for Silo 3, a radiation survey was performed. The radiological survey results did not reveal any significant radiological conditions. However, a visual inspection of the dust collector, located on the dome of Silo 3, revealed that approximately one-third of the west side of the dust collector hopper has rusted away. Further inspection revealed the presence of radioactive material inside the hopper. The material inside the hopper is solid and extends several inches above the bottom of the opening.

As a result of the radiation survey and consistent with Section 40 CFR 300.410 of the NCP, the DOE Fernald Office has determined the need for a Removal Action to mitigate the potential release of material to the environment.

Description of the Proposed Action:

The proposed action involves the stabilization, removal, and demolition of the dust collector on top of Silo 3 along with associated piping, electrical systems and structural steel. In order to gain access to the dust collector, two aluminum staging boards with a 500 pound capacity will be erected so that no contact is made with the top section of the silo dome. The staging boards will be supported on each end with a frame support. The frame support will have a base designed so that it spreads the load of the bridging system below the one hundred pound per square foot maximum requirement.

Only three persons will be allowed on Silo 3 at one time. At no time will the total live loads exceed seven hundred pounds (700 lbs.). Personnel on the silo will be required to wear fall protection gear and be tied off to the perimeter hand rail when possible or a live line when leaving the perimeter hand rail.

SILO 3 REMOVAL ACTION - 2

The first step will be to stabilize the hopper section of the dust collector using a cable and chain suspension system. The dust collector hopper has experienced gross deterioration of the side walls and is considered very fragile. The hopper section is a four-sided sheet metal transitional piece to the rotary feeder valve and is located under the main body of the dust collector. The west side of the hopper section has a hole approximately one square foot in diameter exposing waste materials to the elements. The three remaining sides have minor openings and are considered just as fragile.

The exposed material will be vacuumed out through the opening in the west side. A HEPA vacuum with a knockout drum will be utilized to contain the material. Once the material has been removed to the maximum extent possible, a light gauge expanded metal sheeting will be cut to the same configuration as the side wall of the hopper and attached on the inside of the cable suspension system. Once the metal panels have been installed, polyurethane foam will be applied to fill the void between the hopper side wall and the expanded metal/suspension system. The remaining cavity just above the rotary feeder valve will also be filled with polyurethane foam. This will provide a seal when the hopper is cut just above the rotary feeder valve flange.

The next step after the hopper section has been stabilized will be to demolish all associated piping, electrical systems, and structural steel surrounding the dust collector. All components will be size reduced (when practical) on top of the silo, wrapped in plastic, lowered by a crane, and loaded into white metal boxes at a staging area on the ground.

Once the remainder of the piping, electrical, and structural components are removed, then the dust collector will be detached from the top of the silo, hoisted down, and placed into a sea/land container north of Silo 3. A specific hoisting and rigging plan will be developed for the removal of the dust collector from the silo into another sea/land container. All openings on the silo surface will be closed and sealed with gasketed steel plates and C-clamps.

Categorical Exclusion (CX) to be Applied:

The Amendments to Section D of DOE's NEPA Guidelines, published in the Federal Register on September 7, 1990, add classes of actions generally applicable to all DOE actions that normally do not require Environmental Assessments or Environmental Impact Statements.

SILO 3 REMOVAL ACTION - 3

The Amendments specifically list the following as types of actions that are included:

Removal actions under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (including those taken as final response actions and those taken before remedial action) and actions similar in scope under Resource Conservation and Recovery Act (RCRA) (including those taken as partial closure actions and those taken before corrective action). These activities could include, but are not limited to, the following:

- Removal of drums, barrels, tanks, or other bulk containers that contain or may contain substances identified within the definition of hazardous substances under section 101(14) of CERCLA, or pollutants or contaminants as defined by section 101(33) of CERCLA, or hazardous wastes under 40 CFR part 261 where such actions would reduce the likelihood of spillage, leakage, fire, explosion, or exposure to humans, animals, or the food chain.
- Use of chemicals and other materials to retard the spread of the release or to mitigate its effects, where the use of such chemicals would reduce the spread of, or direct contact with, the contamination.

The CX is appropriate since the proposed action as described, is to conduct a removal action under CERCLA, will not threaten a violation of applicable statutory, regulatory, or permit requirements; will not require siting and construction or major expansion of waste disposal, recovery, or treatment facilities; and will not adversely affect environmentally sensitive areas.

Compliance Action:

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

Approval: R. E. Tiller  
R. E. Tiller, Manager  
U.S. Department of Energy, Fernald Office

Date: 3/3/92

EH-25 has reviewed this determination and has no objection.

Signature: Carol Borgstrom  
Carol Borgstrom, Director  
Office on NEPA Oversight, EH-25

Date: \_\_\_\_\_

United States Government

Department of Energy

Fernald Office

# memorandum

DATE: MAR 03 1992

DOE-1024-92

REPLY TO

ATTN OF: FN:Skintik

SUBJECT: CATEGORICAL EXCLUSION DETERMINATION (CX 369) - SILO 3 REMOVAL ACTION - FERNALD ENVIRONMENTAL MANAGEMENT PROJECT (FEMP), FERNALD, OHIO

TO: Carol Borgstrom, EH-25, FORS

The subject categorical exclusion (attachment) under Section D of the Department of Energy's National Environmental Policy Act Guidelines has been approved and is being forwarded for your review.

The Fernald Field Office requests that you notify us within two (2) weeks, in accordance with the Interim Procedural Guidelines for implementation of SEN-15-90, whether you have any objection to this determination.

If you have any questions, please contact Ed Skintik at FTS 774-6660.

R. E. Tiller  
Manager

Attachment: As Stated

cc w/att.:

- R. S. Scott, EM-20, FORS
- K. A. Hayes, EM-424, TREV
- L. Lawson, EM-431, TREV (2)
- C. J. Brown, WEMCO

MAR 5 3 42 PM '92

