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**RCRA PART B PERMIT APPLICATION FOR THE
U.S. DOE FERNALD ENVIRONMENTAL
MANAGEMENT PROJECT (FEMP), FERNALD,
OHIO; EPA ID NO. OHD6890008976**

10/30/91

**DOE-211-92
DOE-FO/EPA**

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LETTER



Fernald Environmental Management Project
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(513) 738-6357



DOE-211-92

October 30, 1991

Mr. Valdus V. Adamkus
Regional Administrator
U.S. EPA, 5H-12, Region V
230 Dearborn Street
Chicago, Illinois 60604

Mr. Donald R. Schregardus
Director of Ohio EPA
P. O. Box 1049
1800 WaterMark Drive
Columbus, Ohio 43266-1049

Dear Mr. Adamkus and Mr. Schregardus:

RCRA PART B PERMIT APPLICATION FOR THE U.S. DOE FERNALD ENVIRONMENTAL MANAGEMENT PROJECT (FEMP), FERNALD, OHIO; EPA ID NO. OHD6890008976

The U.S. Department of Energy (DOE), Fernald Office (FO), and Westinghouse Environmental Management Company of Ohio (WEMCO), are pleased to submit the enclosed RCRA Part B Permit Application for storage of hazardous wastes at the Fernald Environmental Management Project (FEMP).

The enclosed Permit Application has been extensively revised from previous submittals. Therefore, this submittal has been designated as FEMP REV 0, dated October, 1991. The enclosed permit application has been formatted to comply with the RCRA Part B Permit Application Checklist, last revised in August of 1989, as well as the Ohio Administrative Code 3745-50-41 through 3745-50-44. This submittal also is in compliance with the DOE/Ohio Consent Decree and its proposed amendments which require that the FEMP submit a properly executed revision to the RCRA Part B Permit Application by October 31, 1991.

The State of Ohio and DOE originally entered into the Consent Decree on December 2, 1988. In 1990, the State of Ohio, DOE, and WEMCO negotiated an amendment to the original Consent Decree that included requirements for submittal of this application.

In addition to the Consent Decree and its proposed amendments, DOE has also entered into agreements with U.S. EPA including the Federal Facilities Compliance Agreement (1986) (FFCA) and a CERCLA Consent Agreement (June, 1990 and September, 1991). The FFCA took effect in 1986 and is intended to ensure DOE's compliance with the Clean Air Act, RCRA, and CERCLA. The FEMP was placed on the National Priorities List (NPL) on November 28, 1989, requiring the FFCA

to be amended in 1990. The amended CERCLA Consent Agreement establishes a procedural framework and schedule for developing, implementing, and monitoring appropriate response actions at the FEMP in accordance with CERCLA, the NCP, CERCLA guidance and policy, RCRA, and RCRA guidance and policy. The integration of CERCLA response actions and RCRA corrective action requirements are also delineated in this CERCLA Consent Agreement.

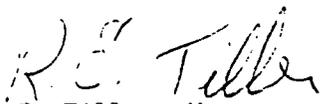
Therefore, in accord with the Consent Decree and its proposed amendments, the Federal Facilities Compliance Agreement, and the amended CERCLA Consent Agreement, the FEMP prepared this RCRA Part B Permit Application and is requesting a permit for storage of hazardous waste in containers for more than 90 days. Enclosure A to this letter provides a brief summary of the units to be permitted and an explanation of the approach taken in writing each of the major sections of the permit application.

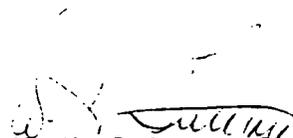
This submittal demonstrates the FEMP's commitment to continue working with U.S. EPA and Ohio EPA in obtaining a RCRA Part B Permit for this facility and complying with the Federal Facilities Compliance Agreement, the amended CERCLA Consent Agreement, as well as the Consent Decree and its proposed amendments. As part of this commitment, the FEMP is continually evaluating and upgrading facility operations to ensure compliance with all applicable environmental regulations. In seeking a RCRA permit for the storage of mixed radioactive/hazardous waste, the FEMP is also striving to integrate the ongoing RCRA and CERCLA programs and activities under the amended CERCLA Consent Agreement and the Consent Decree and its proposed amendments.

Copies of the RCRA Part B Permit Application have been forwarded as noted below.

If you have any questions, please contact David Rast at 513-738-6322.

Sincerely,


R. E. Tiller, Manager
Fernald Office


W. H. Britton, President
Westinghouse Environmental
Management Company of Ohio

Enclosure: As stated

cc w/encl.: (A) Summary of Application (B) Permit Application

K. Pierard, USEPA-V, 5HR-12 (A) (B)
J. Saric, USEPA-V, 5HR-12 (A)
T. Crepeau, Ohio EPA - Columbus, (A) (B)
G. E. Mitchell, OEPA - Dayton, (A)
P. Pardi, OEPA - Columbus, (A) (B) (2cy)
J. S. Rogers, DOJ, (A)
J. Van Kley, Ohio AG, (A)

bcc w/encl.: (A) Summary of Application (B) Permit Application

L. P. Duffy, EM-1, GTN, (A)
J. J. Fiore, EM-42, TREV, (A)
R. P. Whitfield, EM-40, FORS, (A)
R. S. Scott, EM-20, FORS, (A)
E. D. Savage, WEMCO, (A)
AR Coordinator, WEMCO, (A) (B)
Central Files, WEMCO, (A) (B)
Library, WEMCO, (A) (B)

Enclosure A

Brief Summary of RCRA Part A and Part B Permit Application

The FEMP is requesting a RCRA Permit to operate the following container storage areas:

- CP Storage warehouse - Building 56 (Butler Building);
- Plant 1 Pad;
- Plant 8 Warehouse - Building 80;
- Pilot Plant Warehouse - Building 68;
- KC-2 Warehouse - Building 63;
- Plant 9 Warehouse - Building 81; and
- Plant 6 Warehouse - Building 79.

These are the only units for which the FEMP is currently seeking a permit and as such the enclosed RCRA Part B Permit Application focuses on these units. The FEMP is currently considering the need for additional hazardous waste container storage areas. If it is determined that additional storage space is necessary, the FEMP will amend this application.

The management and permitting of hazardous waste storage units present special problems at the FEMP. Most FEMP hazardous wastes are also radioactively mixed waste. The majority of the RCRA Part B Permit Application has been written, however, focusing on the chemical/hazardous nature of the wastes in storage. Radiological information is included for informational purposes and is not intended to be part of the facility's RCRA permit. Source, special nuclear, or by-product material as defined in the Atomic Energy Act is exempt from regulation as a solid waste under RCRA.

The following paragraphs summarize our approach to the preparation of each section of the permit application. This summary should assist in review of the permit application as it provides assumptions and special consideration taken into account in developing the permit application.

Part A Permit Application

The Part A Permit Application has been revised from the June 30, 1991 submittal. The revised pages, as well as the pages which have not changed are included herein. Information provided in the Part A Permit Application has been revised to match information contained in the Part B Permit Application. The Hazardous Waste Management Units (HWMUs) for which the FEMP is seeking a Part B Permit Application are clearly delineated on the Part A Permit. The revisions to the Part A Permit, relative to the HWMUs can be summarized as follows:

- Proposed Building 83X and the Proposed RCRA Warehouse have been removed from the Part A Permit Application (as well as the Part B Permit Application). These units are not currently planned for construction. If these units are needed, they will be added to the Part A and Part B Permit Applications.
- The dimensions of Plant 1 Pad have been extended;
- An experimental treatment facility is being added as a separate HWMU from Waste Pit 5;
- The Tank Farm dimensions have been revised to accurately describe the actual conditions;
- Uranyl nitrate tanks have been added as HWMUs; and
- The operating status of each unit on the list of HWMUs has been revised to include more categories which better reflect current activities at the site.

The Part A Permit Application list of all HWMUs has been revised. Currently there are five categories of HWMUs included in the Part A Permit Application package:

- 1) HWMUs to be permitted (these are included in the enclosed Part B Permit Application);
- 2) HWMUs to be closed;
- 3) HWMUs to be operated with closure to be integrated with CERCLA remedial actions;
- 4) HWMUs not to be operated with closure to be integrated with CERCLA remedial actions; and
- 5) HWMUs that have been closed.

Schedules were submitted to Ohio EPA on August 27, 1991, which presented the anticipated closure schedule for newly identified HWMUs. As the time of closure approaches and an accurate estimate of the constituents and volume of waste to be generated are available, the Part A Permit Application will be revised to include the information.

Section B - General Facility Description

This section provides an overview of the facility operations that were discontinued in July of 1989, as well as topographic map information for the entire facility.

Section C - Waste Characteristics

This section provides the chemical and physical description of the wastes that are currently generated and stored at the facility. Additionally, the Waste Analysis Plan contained in this section outlines the procedures for continued waste analysis of both hazardous waste currently generated on-site, hazardous waste that was previously generated and has not yet been categorized, and hazardous waste from off-site facilities (e.g. returned lab sample wastes). Since the FEMP is continuing to conduct hazardous waste determinations at the site under the Consent Decree and its proposed amendments, new waste streams may be identified and will subsequently be added to the Part A Permit Application as well as Section C of the Part B Application.

Section D - Process Information

This section presents the detailed descriptions of each of the hazardous waste container storage areas for which the FEMP is seeking a permit. Container management practices are also outlined in this section. This section is divided into two major subsections describing two distinct types of container storage areas:

- those designed for management of waste with free liquids; and
- those designed for the management of wastes without free liquids.

Section E - Groundwater Monitoring

The FEMP is not seeking to permit any land based units, and therefore, has not included a description of the present RCRA ground water monitoring program in the Permit Application. Closure of these land based units will be consistent with the final closure and remediation of the entire site under the CERCLA program.

The FEMP has submitted to the Ohio EPA, under separate cover, schedules for the closure of nine land-based units identified in the Part A. A ground water monitoring plan describing monitoring activities relative to the regulated land-based units will be submitted to Ohio EPA by December 20, 1991, in accordance with the schedules submitted to Ohio EPA on August 27, 1991.

Section F - Procedures to Prevent Hazards

This section contains a description of the security measures in place at the facility, an overview of the inspection program and inspection schedule, and a description of the procedures to prevent hazards relative to the management and storage of hazardous waste at the facility.

Section G - Contingency Plan

The Contingency Plan has been written to account for the fact that the facility manages radioactively mixed waste. Radiological information is included for informational purposes and is not intended to be part of the facility's RCRA permit. Source, special nuclear, or by-product material as defined in the Atomic Energy Act is exempt from regulation as a solid waste under RCRA. The Contingency Plan provides response actions, emergency equipment, and evacuation routes for all of the Hazardous Waste Management Units (HWMUs); HWMUs to be permitted and HWMUs to be closed. The Contingency Plan was written in this way to avoid having separate Contingency Plans for different waste management areas, which could ultimately lead to confusion in an emergency situation.

Section H - Personnel Training

This section provides a description of the overall training program at the facility. The training program at the FEMP is comprehensive and contains training for the handling and management of radioactive as well as hazardous waste. Therefore, while Section H describes the training program designed for the handling and management of hazardous waste, it also describes other related training programs that are usually conducted concurrently. Radiological information is included for informational purposes and is not intended to be part of the facility's RCRA permit. Source, special nuclear, or by-product material as defined in the Atomic Energy Act is exempt from regulation as a solid waste under RCRA.

Section I - Closure/Post Closure Plans Information

The FEMP is on National Priorities List (NPL) and the hazardous waste container storage units are subject to ongoing CERCLA action. Closure plan information was developed for each of the hazardous waste container storage units for which the FEMP is seeking a permit, and is included in this section. Closure of any one or all of the HWMUs will be consistent with final closure of the site, as determined through the on-going CERCLA Program. Because all the units to be permitted have concrete floors and all but one unit (Plant 1 Pad) are indoor storage areas, the hazardous waste container storage area closure plan information has been written with clean closure as the goal. If it is determined that clean closure can not be achieved, the FEMP will submit revised closure plan information.

All of the permitted units are intended to attain clean closure, therefore, no post closure activities are anticipated. Since any required post closure activities will be conducted pursuant to final site remediation under CERCLA, the FEMP intends to seek an exemption to post closure requirements for the operating units.

The Closure Plan information included in the RCRA Part B Permit application addresses the facility and all HWMUs the FEMP is seeking to permit. Other HWMUs are being addressed either through the schedules submitted to Ohio EPA August 27, 1991, or through closure plan information previously submitted to US EPA and Ohio EPA.

As discussed in Section I, the FEMP is requesting an extension of the time allowed for closure of the Plant 1 Pad to exceed the 90 days allowed for removal of waste [OAC 3745-55-13(A)] and the 180 days allowed to complete final closure of the unit [OAC 3745-55-13(B)]. This extension is necessary due to the size of the pad (approximately 480,000 square feet), the large volume of hazardous waste expected to be in storage at the unit, and the possible use of the pad for storage of waste from other HWMUs undergoing closure.

Section J - Solid Waste Management Units (SWMUs)

This section provides a description of the Solid Waste Management Units (SWMUs) identified to date at the FEMP. Releases from these units are being investigated and remediated as part of the CERCLA process and according to the amended CERCLA Consent Agreement, which integrates CERCLA response actions and RCRA corrective action obligations.

Section K - Other Federal Laws

This section provides a description of the other laws that may potentially be applicable to this facility.

Section L - Certification

This section contains the RCRA Part B Permit Application Certification which has been signed by both DOE as owner and operator and WEMCO as co-operator.