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**NOTICE OF DEFICIENCY C/TA2**

04/15/94

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LETTER

DOE-FN



State of Ohio Environmental Protection Agency

**Southwest District Office**

40 South Main Street  
Dayton, Ohio 45402-2086  
(513) 285-6357  
FAX (513) 285-6404

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Apr 21 10 09 AM '94

George V. Voinovich  
Governor

CERTIFIED MAIL

FACILITY: U.S. DOE-FEMP  
NOTICE OF DEFICIENCY C/TA2  
OHIO ID: OH 6890008976

April 15, 1994

Mr. J. Phil Hamric, Site Manager  
U.S. Department of Energy  
Fernald Environmental Management Project  
P.O. Box 398705  
Cincinnati, Ohio 45239-8705

Dear Mr. Hamric:

Thank you for your March 29, 1993 submittal of the U.S. Department of Energy Fernald Environmental Management Project (U.S. DOE-FEMP) RCRA Part B Permit Application for storage of hazardous wastes.

The Ohio EPA, Division of Hazardous Waste Management (DHWM) has conducted a completeness/technical adequacy review of your Part B permit application and has determined it to be incomplete and technically inadequate. This application has been reviewed pursuant to the rules published in the Hazardous Waste Facility Standards Chapters in the Ohio Administrative Code and the corresponding Federal regulations.

We have enclosed completeness comments and technical adequacy comments that are the result of this review. Please provide detailed information addressing all areas indicated on the comment sheets to Ohio EPA within 55 days of the date of receipt of this correspondence. This submission shall be in accordance with the following editorial protocol:

1. Old language is overstruck.
2. New language is capitalized.
3. Page headers should indicate date of submission.
4. If significant changes are necessary, pages should be renumbered, table of contents revised, and complete sections provided as required.

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Mr. J. Phil Hamric  
April 15, 1994  
page 2

Please send one copy each to:

Tom Crepeau  
Ohio EPA, DHWM  
Data Management Section  
1800 WaterMark Drive  
P.O. Box 1049  
Columbus, Ohio 43266-0149

Joel Morbito  
RCRA Activities  
Part B Permit Application  
U.S. EPA, Region V, HRM-7J  
77 West Jackson Boulevard  
Chicago, Illinois 60604

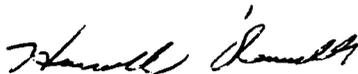
Please send two copies to:

Phil Harris, Division of Hazardous Waste Management  
Ohio EPA, Southwest District Office  
40 South Main Street  
Dayton, Ohio 45402

Failure to submit a complete permit application or to correct deficiencies in the application may result in the following:  
1) denial of the permit application; 2) referral of the matter to the Ohio Attorney General's Office for appropriate enforcement action.

We request that the facility contact Phil Harris of the Southwest District Office at (513) 285-6357 within ten (10) days of receipt of this NOD to discuss each of the enclosed comments in order to make clear the information being requested. This can be accomplished by a conference call. Any questions concerning the review of this permit application and the level of detail expected should be addressed to Mr. Harris.

Sincerely,



Harold O'Connell  
Division of Hazardous Waste Management

Enclosure

5908

Mr. J. Phil Hamric  
April 15, 1994  
page 3

cc w/encl.:

Dan Patulski, USEPA Region V  
Allen Harness, OEPA, DHWM-RES, CO  
Tom Crepeau, OEPA, DHWM-DMS, CO  
Phil Harris, OEPA, DHWM, SWDO

cc w/o encl.:

Joel Morbito, USEPA Region V  
Graham Mitchell, SWDO

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PART B REVIEW COMMENTS  
U.S. DOE-FEMP  
OH 6890008976

GENERAL COMMENTS

1. Specific wording used in the permit application, particularly within Section C, remains somewhat confusing in regard to the facility position on acceptance of off-site waste. In Revision 1.0 of the application, DOE-FEMP has made the appropriate changes to the narrative which address the facility's stated intent regarding the off-site issue. However, Section C procedures appear to be over-designed for the task required to simply confirm and document returning residuals from samples and treatability studies.

Please clarify if those procedures within Section C are for returning residuals, or have been developed for future use in the event DOE-FEMP would propose acceptance of off-site hazardous or mixed waste. If the latter, it is suggested that the appropriate mechanism for that activity would be a permit change request.

Please see Technical Adequacy Comments regarding this issue.

2. The Part B Permit process is designed to establish the specific procedures and controls which the facility will utilize to manage hazardous waste in accordance with regulations governing operation of Treatment, Storage, and Disposal Facilities. DOE-FEMP should be aware that any alteration or deviation of operating procedures from those established by the permit application and subsequent Part B permit must be done in agreement with the permitting process.
3. Within Section B-1, include a brief discussion of remediation activity and site closure under CERCLA. Also reference and briefly discuss the impact of FFCA requirements for DOE mixed waste storage, treatment, and disposal. This will place those activities described within the RCRA permit application in proper context in relation to other site-wide activities.
4. Section H (Personnel Training) was completely revised in Revision 1.0 of the application. It is not clear why the facility felt this necessary, since the section under Revision 0, was essentially acceptable as the Personnel Training Plan. Section G currently does not provide enough detail to adequately describe and outline the essential elements of training necessary for DOE-FEMP personnel involved in hazardous waste management.

U.S. DOE-FEMP Part B Comments  
 April 15, 1994  
 page 2 of 10

It is understood, that of necessity DOE-FEMP has an extensive personnel training program, and much of it is maintained electronically. Hazardous Waste rules require the facility to have a written training plan. While it is not necessary to reproduce the training program verbatim within the permit application, Section G must be viewed as the written program that describes personnel training. Please revise this section accordingly.

### SPECIFIC COMMENTS

#### COMPLETENESS COMMENTS

**A. PART A APPLICATION CHECKLIST**  
 OAC 3745-50-40; 50-42; 50-43;

5. The following waste codes were listed on the Part A included with Part B Application Revision 0, and are not listed on the Part A included with Part B Application Revision 1.0:

D038	U078	U169
D041	U079	U188
D042	U101	U196
U036	U105	U227
U037	U127	U240
U043	U128	U247
U052	U129	
U056	U131	

The Part A/Part B permit will identify all EPA waste codes managed by the facility. Within DOE-FEMP's response to OEPA comments please provide information which explains the above deletions, and indicate the status of waste characterization efforts with regard to mixed waste/hazardous waste in storage at the facility.

**B. FACILITY DESCRIPTION CHECKLIST**  
 OAC 3745-50-44;

6. Submit a copy of the new topographical map with updated contour information. Reference DOE-FEMP response to OEPA comment #48 for the November 1, 1991 application submittal.

U.S. DOE-FEMP Part B Comments  
April 15, 1994  
page 3 of 10

**D. PROCESS INFORMATION CHECKLIST**  
OAC 3745-50-44; 55-75;

7. The following sub-sections of Section D, fail to provide any information concerning the Plant 8 Warehouse (Building 80):
- \* D-1a(3) Secondary Containment Design and Operation.
  - \* D-1a(3)(a) Requirement for the Base to Contain Liquids.
  - \* D-1a(3)(b) Containment System Drainage.
  - \* D-1a(3)(c) Containment System Capacity.
  - \* D-1a(3)(d) Control of Run-on.
  - \* Table D-1 RCRA Storage Units.
  - \* Attachment D-2 Secondary Containment Calculations and Summary Table.

Please revise this section to include all the appropriate information for the Plant 8 Warehouse container storage unit.

8. Revise the introduction of Section D (or as an alternate location; Section C-4.0 Storage and Management of Wastes) to include information on the facility's tracking mechanism for hazardous waste containers in storage. Provide an overview of all management systems (eg. waste analysis plan, container labeling procedures, inspection programs, storage unit logs, etc.) which enable efficient information retrieval pertaining to location, contents, and status of waste containers.
- E. GROUNDWATER MONITORING**  
OAC 3745-50-44;

9. Reference Director's Findings and Orders issued to the facility on September 10, 1993, with respect to groundwater monitoring requirements, and include a copy of the monitoring program as part of the permit application. Summarize the circumstances and facility conditions which led to the implementation of RCRA groundwater monitoring plans at the site. Discuss current facility groundwater monitoring activity, and describe the current monitoring system in terms of number and types of wells. Indicate that DOE-FEMP is not seeking to permit land based units, and that these units are undergoing remediation under the CERCLA process.

- END COMPLETENESS COMMENTS -

**PART B REVIEW COMMENTS**  
**U.S. DOE-FEMP**  
**OH 6890008976**

TECHNICAL ADEQUACY COMMENTS

**C. WASTE CHARACTERISTICS CHECKLIST**  
OAC 3745-50-44; 54-13;

10. Off-site generation of waste is referenced in Waste Analysis Plan in (at least) the following locations:
- \* Section C-1.1 Organization (1st paragraph, 2nd sentence),
  - \* Section C-1.2 Site Background (2nd paragraph, last sentence),
  - \* Section C-1.3 Regulatory Compliance (1st paragraph, 1st sentence and last sentence of 1st bullet under the 2nd paragraph),
  - \* Section C-3.0 Waste Acceptance Criteria

Revise language in these areas of the permit application to indicate that "off-site" waste is limited to acceptance of residuals from laboratory analyses and treatability studies of DOE-FEMP waste. This would be consistent with information given under Section B-1, Facility Description.

11. Information in Tables C-3 through C-6 could be better presented to show how each wastestream is analyzed. Investigate the possibility of cross-indexing Table information for the following areas:
- \* Reference Table C-3 Characterization (Analysis) Requirements with Table C-6.
  - \* Reference Table C-4 with Table C-3.

12. Section C-1.2 SITE BACKGROUND:

The text indicates 21 waste categories are shown in Table C-2, however, the table depicts 20 waste categories (No. 1-19, plus 99). Please correct the discrepancy.

U.S. DOE-FEMP Part B Comments  
April 15, 1994  
page 5 of 10

13. Section C-1.3 REGULATORY COMPLIANCE (1st bullet under 2nd paragraph):

Describe the types of information available regarding off-site waste from DOE facilities that is part of backlog inventory.

14. Section C-2.0 WASTE DETERMINATION:

DOE-FEMP's Waste Determination Plan (WDP) was developed, as a requirement of the Consent Decree with the State of Ohio, to address hazardous waste characterization procedures at the facility. Please provide information to discuss and describe the relationships between the WDP and the hazardous waste characterization procedures of the Waste Analysis Plan (WAP, ie., Section C) as presented in the permit application. The two plans are designed, in part, to accomplish the same tasks. DOE-FEMP may wish to make a conceptual evaluation in regard to the following:

- \* Will the WDP remain viable and/or appropriate to characterization activity as the WAP is developed? In theory the WAP could supersede the WDP and the WDP be withdrawn.
- \* Should the WDP be viewed as a component WAP? If so, in what context? What elements of the two plans are in conflict?

15. Section C-2.1 PROCEDURES:

Material Evaluation Form

- a. Information in this section states that a Material Evaluation Form ... "is included as an example...and is subject to change, based upon changes in regulatory requirements or site procedures/requirements."

DOE-FEMP should be aware that any subsequent changes to contents of the Part B Application after permit issuance are subject to the permit change request process.

- b. The 4th paragraph of this section references the waste characterization group as responsible for making characterization determinations. Provide a brief description of this group in terms of DOE-FEMP organization and accountability. It may be useful to provide an organizational table to depict overall hazardous waste/mixed waste management organization.

U.S. DOE-FEMP Part B Comments  
April 15, 1994  
page 6 of 10

Compatibility

- c. Delete the last sentence of 1st paragraph, or describe additional types of appropriate containers available with respect to waste/container compatibility.

Waste Determination

- d. 1st sentence of 2nd paragraph is an incomplete sentence. Revise to clarify meaning.

16. Section C-2.2 ANALYSIS:

- a. The 2nd paragraph bullets Waste Analysis Plan objectives. The 3rd paragraph indicates that this plan may also be used for treatment selection information. Revise the text to indicate that appropriate treatment selection is also a main objective of the Waste Analysis Plan, and that the plan is designed to provide as much relevant information as is possible in this regard, given the current limits of mixed waste treatment capacity.

TCLP Metals Analysis

- b. The statement that "if total metals concentrations do not exceed twenty times (20x) the TC, then the waste cannot possibly fail the TC", is inaccurate. Please review the TCLP guidelines and revise the waste analysis procedures to clarify when TCLP is appropriate in the characterization process.

Number of Samples

- c. The 1st and 2nd paragraphs refer to "general procedures" and a "general guideline" with respect to representative sampling. Revise the text to indicate a commitment to a standard procedure rather than general procedures or guidelines.
- d. Identify the source/guideline which is the basis for equating the number of samples required for a given waste stream as representative of the container population.
- e. Identify the source or reference for the equation (for containers with volumes of 20 cubic yards or larger) used to develop the number of grab samples which are then composited as a representative sample.
- f. In the discussion of composite sampling procedures, indicate that this sampling technique is only appropriate for materials from the same wastestream.

U.S. DOE-FEMP Part B Comments  
April 15, 1994  
page 7 of 10

17. Section C-3.0 WASTE ACCEPTANCE CRITERIA:

- a. This section of the waste analysis plan remains ambiguous with respect to acceptance of off-site waste. The application must be explicit with regard to DOE-FEMP's intent to manage hazardous waste. As stated in the opening narrative, the current understanding between DOE-FEMP and OEPA is that the facility will not accept anything other than residues (with radionuclide content that originated from FEMP) from samples sent off-site for analysis or treatability studies. In reviewing this section however, it would appear DOE-FEMP is prepared to accept waste other than returning residues. It is suggested that this section (and supporting Figures and Attachments) be re-written to describe only the procedures and criteria DOE-FEMP will employ to accept returning waste residues. This section cannot be completely reviewed by the Agency until DOE-FEMP proposals on this issue are clearly stated. Please reference comments made below under Section C-3.1 OPERATIONS, as examples.
- b. The 3rd paragraph references "...Hazardous Waste Receipt Procedure is shown in Attachment C-3." Attachment C-3 is not included with this application submittal, nor is it referenced within the Table of Contents.

18. Section C-3.1 OPERATIONS:

- a. This section is ambiguous in light of stipulations DOE-FEMP presents in the preceding section (C-3.0 WASTE ACCEPTANCE CRITERIA). Please clarify the reference to "Generators will provide the FEMP with waste characterization data for each waste stream shipped to the FEMP from an off-site facility...", and other references to "generators" as used within this section. Who are the generators?
- b. The 2nd paragraph of this section (top of pg. 16) states, "The following types of waste cannot be accepted at FEMP:" What is the basis for stipulating the list of waste types which cannot be accepted, and the implication that other waste types will be accepted? Please clarify.
- c. Page 19 of this section states, "When hazardous waste arrives at the FEMP, acceptance verification is initiated..." Are the procedures described in regard to returning residuals? Are these procedures designed for hazardous waste other than returning residuals? Please clarify.

U.S. DOE-FEMP Part B Comments  
April 15, 1994  
page 8 of 10

- d. Table C-9 (Acceptance Criteria on Fingerprint Analysis for Waste Received from off-site) information must be clarified in context with the off-site acceptance issue. What is the justification for the fingerprint parameters specified?

19. Section C-4.0 STORAGE AND MANAGEMENT OF WASTES:

Consolidation of Wastes

- a. Describe the review procedure used to ensure consolidated wastes are compatible.

Additional Requirements Pertaining to Storage of Restricted Wastes

- b. This reviewer does not consider the discussion of storage provisions under OAC 3745-59-50 (40 CFR 268.50), as relevant to the lack of mixed waste treatment capacity. Requirements under the Federal Facility Compliance Act will have bearing on the storage and disposition of mixed waste. Storage of mixed waste, as addressed by this application, is based on the premise that such waste will eventually be treated for disposal under the provisions of FFCA and/or CERCLA.

Wastes Meeting Applicable Treatment Standards

- c. Clarify reference to "notification/certification". Waste meeting treatment standards are "certified".

G. CONTINGENCY PLAN CHECKLIST

OAC 3745-50-44; 54-50 through 54-56;

20. Section G-2 EMERGENCY COORDINATION:

(Reference OEPA comment #19.b for the November 1, 1991 application submittal):

The added Figure G-3.1, as referenced in Section G-2 does not adequately present the qualifications which demonstrate that individuals who assume the role of Emergency Coordinator (AEDO), Emergency Duty Officer, or Emergency Chief have the knowledge and experience to respond to all emergencies which may occur at the facility. This Figure does provide some useful information regarding facility Emergency Response Training Requirements, but the foot-note states that additional training may be necessary to fulfill emergency responsibilities. Within Section G-2, please utilize language from facility position descriptions or job requirements to demonstrate required qualifications for these positions.

U.S. DOE-FEMP Part B Comments  
April 15, 1994  
page 9 of 10

21. Section G-4j(4) Notifications, Reports

(Reference OEPA comment #29 for the November 1, 1991 application submittal):

Revise the language to specify that (release information) notification or reporting is (or is also) made to the Director OEPA.

H. **PERSONNEL TRAINING CHECKLIST**  
OAC 3745-50-44; 54-16;

22. Section H INTRODUCTION:

The 2nd paragraph references training provided employees in waste management positions, but the plan does not clearly identify that training. Information under H-1b(1) supposedly addresses training content, however, the information is not specific. Please revise to better outline the content of hazardous waste management training.

23. Section H-1a Job Title/Job Description

- a. Within the training plan, provide the job title and job description for each employee classification whose position at the facility is involved in hazardous waste management.
- b. The text gives brief descriptions of 3 worker classifications; Non-Hazardous Site Worker, Occasional Site Worker, and General Site Worker. Clarify how these classifications relate to hazardous waste management personnel. Are hazardous waste management employees "Occasional Site Workers", and hazardous waste staff employees "General Site Workers"? Do personnel change from one classification to another on a daily/weekly basis? The classification system is not clearly explained in the context of personnel engaged in hazardous waste management activity.

24. Section H-1b(1) Training Content

This section states "...employees receive... facility-specific training in the following areas", and itemizes training by personnel classification. For example, the classification of General Site Worker lists several areas of training; Safety and Health information (basic and advanced), Standard operating procedure, Engineering controls, Waste management, etc. Are these "areas of training" meant to be titles of training classes or courses, or just broad descriptions of relevant training?

U.S. DOE-FEMP Part B Comments  
April 15, 1994  
page 10 of 10

What are the specifics of training provided in regard to "Engineering controls", and "Waste Management"? Clarify this section to provide a better description or outline of the content of these training components.

- END TECHNICAL ADEQUACY COMMENTS -

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