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U-006-305 .54

**HAMILTON COUNTY COMMENTS - OU 4 PHASE II PILOT PLANT  
TRT STUDY WP**

09/08/94

OEPA            DOE-FN  
5  
COMMENTS



State of Ohio Environmental Protection Agency

Southwest District Office

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5981

H-5709

George V. Voinovich  
Governor

September 8, 1994

Re: DOE FEMP  
MSL #531-0297  
HAMILTON COUNTY  
COMMENTS - OU 4 PHASE II  
PILOT PLANT TRT STUDY WP

Mr. Jack Craig  
Project Manager  
U.S. DOE FEMP  
P.O. Box 398705  
Cincinnati, OH 45329-8705

Dear Mr. Craig:

Attached are Ohio EPA's comments on the revised Operable Unit 4 Phase II Pilot Plant Treatability Study Work Plan submitted to Ohio EPA on August 8, 1994. Ohio EPA still has significant outstanding concerns regarding this document. We believe it would be more efficient to meet and discuss the resolution of these comments prior to DOE attempting to revise the document. Ohio EPA has discussed this with USEPA and are in agreement with this path forward. We propose to meet on September 27, 1994 in Chicago to resolve these issues. Ohio EPA expects that DOE will come prepared to resolve these outstanding issues.

If you should have any questions concerning this letter feel free to contact Kelly Kaletsky (285-6454) or me.

Sincerely,

Thomas A. Schneider  
Fernald Project Manager

Att.

cc: Jim Saric U.S. EPALisa  
Ken Alkema, FERMC0  
Robert Owen, ODH  
Jean Michaels, PRC  
Manager TPSSU, DERR/CO

August, GeoTrans  
Mike Proffitt, DDAGW

(allen (r)  
partial  
action response  
to doe-2187-94  
(8314)

**Ohio EPA Comments  
On Draft Final  
OU-4 Pilot Plant Phase II  
Treatability Study Work Plan**

- 1) Commenting Organization: Ohio EPA                      Commentor: OFFO  
Section #: General Comment              Pg #:    Line #:              Code: C  
Original Comment #:  
Comment: In reviewing the response to comments on the OU-4 Phase II, the FEMP referred to changes made to specific sections or pages within the document. However, it was extremely difficult or impossible to locate some of these changes, as they were not located where indicated in the response to comments. In future documents, please ensure the accuracy of location of noted changes.  
Response:  
Action:
  
- 2) Commenting Organization: Ohio EPA                      Commentor: OFFO  
Section #: General Comment              Pg #:    Line #:              Code: C  
Original Comment #:  
Comment: As will be specified in following comments, many sections of this document lack specific details. Although it may be difficult to anticipate because this is a pilot project, the FEMP should be aware that as much detailed information as possible should be provided for OEPA review.  
Response:  
Action:
  
- 3) Commenting Organization: Ohio EPA                      Commentor: OFFO  
Section #: 2.1.1              Pg #: 2-8              Line #: 27              Code: C  
Original Comment #:  
Comment: Will the isokinetic sampler be supervised at all times during the vitrification process? If emissions fall outside of regulatory limits, how much time will it take to shut down the system and arrive at zero emissions? If this were to happen, how would a shutdown affect the material in the furnace?  
Response:  
Action:
  
- 4) Commenting Organization: Ohio EPA                      Commentor: OFFO  
Section #: 3.2.3              Pg #: 3-2              Line #: 22              Code: C  
Original Comment #:  
Comment: Provide details on the hopper to be used to transport Silo 3 material from the silo to the vitrification building. Is there any possibility of material becoming airborne? Is there not a direct route to transport the material from the silo to the building (i.e. piping)?  
Response:

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Action:

- 5) Commenting Organization: Ohio EPA                      Commentor: OFFO  
Section #: 3.2.7      Pg #: 3-3      Line #: 25      Code: C  
Original Comment #:  
Comment: The text describes existing radon detection instruments at the FEMP that will provide adequate radon control. Please provide detailed information regarding these instruments. If alpha scintillation detectors will be used, how will readings be taken and how often? It stands to reason that if the radon detectors along the FEMP fence line show elevated radon levels, it will be too late to avoid a release and exposure cannot be controlled. The FEMP should rely more heavily on the new monitors. Please describe the new monitors, where they will be located and how they will be monitored.  
Response:  
Action:
- 6) Commenting Organization: Ohio EPA                      Commentor: OFFO  
Section #: 4.1.1      Pg #: 4-1      Line #: 24      Code: C  
Original Comment #:  
Comment: This section of the text lacks detail needed for approval. The text states that if the glass is determined to have characteristics that indicate poor durability, an adjustment to the formulation will be made. Describe in detail how these adjustments will be made. The FEMP needs to list methodical steps for possible adjustments.  
Response:  
Action:
- 7) Commenting Organization: Ohio EPA                      Commentor: OFFO  
Section #: 4.1.1      Pg #: 4-3      Line #: 15      Code: C  
Original Comment #:  
Comment: Describe how or what adjustments will be made to prevent foaming.  
Response:  
Action:
- 8) Commenting Organization: Ohio EPA                      Commentor: OFFO  
Section #: 4.1.1      Pg #: 4-4      Line #: 9      Code: C  
Original Comment #:  
Comment: The FEMP proposes sampling the off-gas treatment system one time per batch. Will off-gas vary as the melt heats? Please provide information regarding the time it takes for a batch to be processed. If the processing time per batch is lengthy, the FEMP should consider monitoring continuously, or at least more than once per batch.  
Response:  
Action:

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- 9) Commenting Organization: Ohio EPA Commentor: OFFO  
Section #: 10.1 Pg #: 10-1 Line #: 18 Code: C  
Original Comment #:  
Comment: Unprocessed silo material is described as remaining in the silo pending final remediation. Describe what steps will be involved in the final remediation of the silo and what will happen to the remaining material.  
Response:  
Action:
- 10) Commenting Organization: Ohio EPA Commentor: OFFO  
Section #: 10.3 Pg #: 10-2 Line #: 25 Code: C  
Original Comment #:  
Comment: How will spent carbon and HEPA filters be disposed?  
Response:  
Action:
- 11) Commenting Organization: Ohio EPA Commentor: OFFO  
Section #: 11.5.1 Pg #: 11-4 Line #: 18 Code: C  
Original Comment #:  
Comment: Section 11.5.1 states that construction and operation of the Phase II Pilot Plant may generate nuisance dust during construction. Provide details regarding the control of the dust. OEPA needs more information than "approved site standard operating procedures and best available technology" as listed in the text.  
Response:  
Action:

The following comments are from the FEMP's response to comments submitted by OEPA:

- 12) Commenting Organization: Ohio EPA Commentor: OFFO  
Section #: 2.1 Pg #: 2-2 Line #: 5 Code: C  
Original Comment #: 8  
Comment: The FEMP states that Section 2.0 is being revised. Please provide a timetable for completion and submittal of the revised Section 2.0.  
Response:  
Action:
- 13) Commenting Organization: Ohio EPA Commentor: OFFO  
Section #: 5.0 Pg #: 5-1 Line #: 3-5 Code: C

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Original Comment #: 16

Comment: According to FEMP's comment, on-site equipment has been identified, incorporated into the Pilot Plant design and is described in Table 5-1. Is this the on-site equipment listed in the table with FERMCO as the vendor?

Response:

Action: