

**4247**

**COMMENTS ON THE WORK PLAN ADDENDUM  
FOR THE K-65 VADOSE AND PERCHED WATER**

**OEPA/DOE-FN**

**3  
LETTER**



State of Ohio Environmental Protection Agency

Southwest District Office

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

LOG 6-02844  
FILE AR  
LIBRARY \_\_\_\_\_

MAR 22 10 22 AM '93

4247

George V. Voinovich  
Governor

March 18, 1993

Mr. Jack R. Craig  
Project Manager  
U.S. DOE FEMP  
P. O. Box 398705  
Cincinnati, Ohio 45239-8705

Dear Mr. Craig:

Attached are Ohio EPA comments on the Work Plan Addendum for the K-65 Vadose and Perched Water. If you have any questions about these comments please contact Tom Schneider or me.

Sincerely,

Graham E. Mitchell  
Project Manager

GEM/bjb

- cc: Jenifer Kwasniewski, DERR
- Tom Schneider, DERR
- Jim Saric, U.S. EPA
- Dennis Carr, FERMCO
- Lisa August, GeoTrans
- Jean Michaels, PRC
- Robert Owen, ODH

*(VERACE)  
PARTIAL ACTION RESPONSE  
TO DOE-1128-93  
(5781)*

**Comments**

The following are Ohio EPA comments on the Work Plan Addendum for Additional Characterization of the K-65 Vadose and Perched Groundwater document:

- 1) Commenting Organization: Ohio EPA Commentor: M. Proffitt  
 Section #: 2.2.3 Pg #: 3 Line #: para 1 Code:  
 Original Comment #:  
 Comment: This paragraph is ambiguous. The second to last sentence implies that the perched zone present below the silos is contiguous throughout the "waste storage facilities" on site. The DOE has indicated previously that this condition does not exist; however, the technical justifications for this has not, as of yet, been submitted to Ohio EPA for review. Documentation supporting this condition should be prepared by DOE and submitted to Ohio EPA for review as soon as possible.

Response:

Action:

- 2) Commenting Organization: Ohio EPA Commentor: M. Proffitt  
 Section #: 3.1 Pg #: 4 Line #: para 1 Code:  
 Original Comment #:  
 Comment: The previous paragraph states that the lower perched zone was found in only boring 1616. However, this paragraph implies that it is also present at boring 1032. The paragraphs should be reworded to clarify the location of the lower perched zone.

Response:

Action:

- 3) Commenting Organization: Ohio EPA Commentor: M. Proffitt  
 Section #: 3.1 Pg #: 4 Line #: para 1 Code:  
 Original Comment #:  
 Comment: The DOE should clarify why "cross contamination" occurred in boring 1032. The DOE does not clearly indicate whether this cross contamination is the result of smearing while the sample was obtained, from inadequate decontamination, or if it has resulted from migration of contaminated ground water from the upper perched zone to the lower perched zone.

Response:

Action:

2. Commenting Organization: Ohio EPA Commentor: K.K.  
Section #: 3.1 Pg #: 4 Line #: Data Quality Objectives Code: c  
Original Comment #:

Comment:

The area to the south of the K-65 silos has an intermittent creek channel which discharges into Paddys Run. During a recent walk through by OEPA, DOE and FERMCO personnel, seepage of groundwater was observed coming from the embankments to the waterway. The possibility of this seepage being contaminated perched groundwater originating from under the K-65 silos and the creek being a transport vehicle to Paddys Run needs to be investigated.

Response:

Action:

- 4) Commenting Organization: Ohio EPA Commentor: M. Proffitt  
Section #: 3.2.3 Pg #: 5 Line #: para 2 Code:  
Original Comment #:  
Comment: The DOE should justify the use of a .02 inch slotted screen in a potentially fine grained formation.

Response:

Action:

- 5) Commenting Organization: Ohio EPA Commentor: M. Proffitt  
Section #: 3.2.3 Pg #: 7 Line #: para 1 Code:  
Original Comment #:  
Comment: The Operating Principles for the lysimeter included in the work plan explain that the distilled water will separate from the flour and migrate into the soil. However, it would appear that the time necessary for the water to migrate into a silt or clay would be quite excessive. If the formation is fine grained, it may be necessary to use dry silica flour. Note: special precautions will be necessary when handling dry silica flour to prevent the inhalation of dust particles.

Response:

Action: