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SUBMITTAL OF THE RESPONSES TO COMMENTS ON THE ADDENDUM TO THE PROJECT SPECIFIC PLAN FOR PHASE I AND PHASE II OF THE OPERABLE UNIT 2 PREDESIGN REPORT

04/12/96

DOE-0775-96
DOE-FN EPAS
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RESPONSES

Department of Energy
Ohio Field Office
Fernald Area Office
P. O. Box 538705
Cincinnati, Ohio 45253-8705
(513) 648-3155

APR 12 1996

DOE-0775-96

Mr. James A. Saric, Remedial Project Director
U.S. Environmental Protection Agency
Region V - SRF-5J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

SUBMITTAL OF THE RESPONSES TO COMMENTS ON THE "ADDENDUM TO THE PROJECT SPECIFIC PLAN FOR PHASE I AND PHASE II OF THE OPERABLE UNIT 2 PREDESIGN REPORT"

Enclosed for your review and approval is the U.S. Department of Energy's (DOE) Response to Comments on the "Addendum to the Project Specific Plan for Phase I and Phase II of the Operable Unit 2 (OU2) Predesign Report." We would appreciate your comments and concurrence within a month.

If you have any question or comments, please contact Mr. Rod Warner at (513) 648-3156.

Sincerely,

Susan M Citterman for

Johnny W. Reising
Fernald Remedial Action
Project Manager

FN:Jalovec

Enclosure: As Stated

cc w/enc:

R. L. Nace, EM-423/GTN
G. Jablonowski, USEPA-V, 5HRE-8J
Manager, TPSS/DERR, OEPA-Columbus
F. Bell, ATSDR
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U.S. EPA COMMENTS ON THE " Addendum To The Project Specific Plan for Phase I And Phase II Of The Operable Unit 2 Predesign Investigation Report"

Commenting Organization: U.S. EPA Commentor: Saric
Section #: NA Pg. #: NA Line #: NA Code: C
Original General Comment #: 1

Comment: The addendum to the project specific plan does not establish any requirements for reporting the data obtained during this additional investigation or the results of analysis of those data. It is understood that the data obtained will be used to support the design of the on-site disposal facility; however, a summary report outlining the results of this additional investigation should be submitted to the U.S. Environmental Protection Agency (EPA).

Response: A summary report outlining the results of the Addendum activities will be submitted to the U.S. Environmental Protection Agency and the Ohio Protection Agency. This report has been scheduled for submittal no later than August 8, 1996.

Action: No action.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 2.1 Pg. #: 4 Line #: 1-13 Code: C
Original Specific Comment #: 1

Comment: This section discusses the use of a flow meter system to determine the flow direction and flow rates of the perched groundwater. U.S. EPA recognizes the use of flow meters for that purpose; however, in a low-flow environment such as tills at the site, the accuracy of such meters is questionable. Flow meters generally are used in high-flow environments. Justification for the use of flow meters and their appropriateness for this investigation should be provided.

Response: The KV Flowmeter is a heat-pulse flow meter and is designed to measure very slow flow rates, down to 0.01 ft./day. Therefore, there isn't an anticipated effect on the usability of the flow meter in the till.

Action: Added this justification to line 13.

Commenting Organization: U.S. EPA Commentor: Saric
Figure #: 1 Pg. #: NA Line #: NA Code:
Original Specific Comment #: 2
Comment: Figure 1 should show the location of the existing drainage tile network.

Response: Agreed.

Action: The drainage tile that has been visually identified has been added to Figure 1.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 2.3 Pg. #: 5 Line #: 7-9 Code: C
Original Specific Comment #: 3
Comment: This section provides the methodology for collection of samples of perched groundwater from the vicinity of wells 11547 and 11548. The text states that samples of unfiltered water will be collected from 16 locations for analysis of total uranium. The text states further that, "if contaminated water is encountered, up to three additional wells per existing well location may be installed to confirm the nature and extent of contamination." The proposal for as many as six new groundwater monitoring wells in the area of the on-site disposal facility seems excessive because of the associated cost and the need to preserve the integrity of the underlying clay unit. It is recommended that new monitoring wells be installed only if doing so is the only practicable means of characterizing the perched water zone. Collection of perched water samples using a geoprobe and collection of surface soil samples is a preferred alternative to the installation of additional monitoring wells.

Response: Agreed. New monitoring wells will be installed only if it is the only practicable means for characterizing the perched water zone.

Action: No action.

COMMENTS ON THE " Addendum To The Operable Unit 2 Project Specific Plan for Phase I And Phase II Of The Operable Unit 2 Predesign Report"

Commenting Organization: Ohio EPA Commentor: GeoTrans, Inc.
Section #: 1.0 Pg. #: 1 Line #: 22-24 Code: C
Original Comment # 1

Comment: Current preliminary construction plans for the On-Site Disposal Facility call for removal of three to five feet of the upper till, not to eleven feet. The existing drainage tile system is believed to be located approximately four to five below grade.

Response: The preliminary construction plans call for the nominal excavation of 2 to 11 feet of the upper till to construct the liner system. The planned excavation to install the liner system generally follows the existing terrain thereby maximizing the thickness of the clay units under the On-Site Disposal Facility (OSDF). The east-west leachate collection pipes are currently designed with a minimum slope of 1 percent to assure post-settlement gravity drainage. Due to the mildly undulating terrain and OSDF geometry, this results in variable excavation depths. For the east-west leachate collectors, the proposed depth of excavations have the following ranges:

DEPTH (FT)

	MIN	MAX	AVG
East Limit	4	9.5	6.8
Center Line	2.0	13.5	7.0
West Limit	4.0	10.5	7.0

In areas with shallow excavations (i.e., less than 5-ft) special precautions will be taken during subgrade preparation to ensure the removal of the drainage tile prior to construction of the liner system.

Action: No action.

Commenting Organization: Ohio EPA Commentor: GeoTrans, inc. 259
Section #: 2.1 Pg. #: 4 Line #: 1-13 Code: C
Original Comment # 2

Comment: Slug tests are not included as part of the Groundwater Flow Characterization tasks to be performed. The need for slug tests was identified in the Modeling, Section 3 and Path Forward, Section 6 of the Predesign Investigation and Site Selection Report for the On-Site Disposal Facility, July 1995. Slug test were to be performed to better determine the horizontal hydraulic conductivities of the upper aquifer system.

Response: Slug tests were performed in May and July of 1995, during Phase III of Sitewide Disposal Facility Field Investigation (see section 7.25, GSTP for Phase III of Sitewide Disposal Facility Field Investigation, Revision 2), after the predesign activities were completed. The results from the slug tests will be presented in the same report that presents the results of the Addendum activity.

Action: No action.

Commenting Organization: Ohio EPA Commentor: DDAGW
Section #: 2.1 Pg. #: 4 Line #: Code:
Original Comment # 3

Comment: Flow meters are usually useful when flow rates are high, such as for a sand and gravel aquifer. What will the effect of the slow flow rate in the till aquifer be on the usability of the flow meter in this investigation?

Response: The KV Flowmeter is a heat-pulse flow meter and is designed to measure very slow flow rates, down to .01 ft./day. Heat-pulse flowmeters have the ability to provide accurate and vertically discrete measurements of hydraulic conductivity, as referenced in the RCRA Groundwater Monitoring: Draft Technical Guidance, 1994, page 4-50.

Action: No action.

Commenting Organization: Ohio EPA Commentor: GeoTrans, Inc.
Section #: 2.2 Pg. #: 4 Line #: 16-17 Code: C
Original Comment # 4

Comment: The existing drainage tile network that has already been identified is not shown on Figure 1.

Response: The location of known drainage tiles will be added to Figure 1.

Action: Drainage tile locations were added to Figure 1 (see attached).