

**RESPONSES TO TECHNICAL REVIEW COMMENTS ON  
"ADDENDUM NO. 1 FOR AREA 2, PHASE I SOUTHERN WASTE UNITS  
IMPLEMENTATION PLAN FOR OPERABLE UNIT 2"**

**FERNALD ENVIRONMENTAL MANAGEMENT PROJECT**

**GENERAL COMMENTS**

Commenting Organization: U.S. EPA  
Appendix #: Not Applicable (NA)      Page #: NA  
Original General Comment #: 1

Commentor: Saric  
Line #: NA

Comment: The text contains the errors noted in the specific comments below. The addendum should be thoroughly checked for other similar problems not identified below and revised accordingly. New text, including discussions of the two additional borings (SWU-5-45 and SWU-5-46), should also be checked for such errors prior to submittal for review.

Response: Noted.

Action: Text containing errors below have been revised; the addendum (including data and discussion of borings SWU-5-45 and SWU-5-46) is being incorporated into the A2PI Implementation Plan. The entire document will be proofed for consistency.

**SPECIFIC COMMENTS**

Commenting Organization: U.S. EPA  
Section #: 2.2.1      Page #: 2-4  
Original Specific Comment #: 1

Commentor: Saric  
Line #: NA

Comment: The first line of the first paragraph states that there is "shine" on the north and west sides of soil pile 5 (SP-5). However, the line in the paragraph just before the bulleted list refers to "shine" in the "northeast portion of the pile" (meaning SP-5). In addition, the first line on page 2-5 refers to sampling locations in the "southeast corner of the pile," but Figure 2-2 shows that the cited points are located in the southwest corner of SP-5. The text should be revised to resolve these and all other directional discrepancies.

Response: Noted.

Action: Text revised as follows:

First line of first paragraph revised to read "Real-time monitoring results indicate that there is 'shine' on the north and east sides of SP-5."

The line in the paragraph before the bulleted list has been revised to read "...with both RTRAK and HPGe detectors in the northern and eastern portions of SP-5."

The first line on page 2-5 has been revised to read "...uranium WAC in the southwest corner of the pile, ..."

Commenting Organization: U.S. EPA  
Section #: 3.0      Page #: 3-1  
Original Specific Comment #: 2

Commentor: Saric  
Line #: NA

Comment: The text states that four additional borings were completed in the above-waste acceptance criteria (WAC) area and identifies them as SWU-5-40, SWU-5-41, SWU-5-42, and

SWU-5-43. According to Table D-7, the new boring locations are SWU-5-41, SWU-5-42, SWU-5-43, and SWU-5-44. The text and table should be revised to be consistent. In addition, Figure D-48 should be revised to show these and any other new boring locations.

Response: Noted.

Action: Text has been revised to read: "At the request of the Ohio Environmental Protection Agency (OEPA), additional borings were completed in the above-WAC area in A2PI [SWU-5-41, SWU-5-42, SWU-5-43, SWU-5-44, SWU-5-45, and SWU-5-46 (see Figures D-36, D-48, and D-49)]. In order to obtain sufficient volume for lab analysis, one boring for collection of the FDF sample was completed (SWU-5-41, SWU-5-42, SWU-5-43, SWU-5-44, SWU-5-45, and SWU-5-46) and an adjacent boring was completed for collection of the OEPA sample (SWU-5-EPA41, SWU-5-EPA42, SWU-5-43A, and SWU-5-EPA44)." Table D-7 was revised to include these additional borings. Figure D-48 has been revised to include borings SWU-5-41 through SWU-5-46.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 3.1

Page #: 3-1

Line #: NA

Original Specific Comment #: 3

Comment: The text states that only one of the four additional borings exhibited total uranium levels exceeding the WAC. However, Table D-10 indicates that samples from boring SWU-5-43 also contained uranium at concentrations exceeding the WAC. The text and Table D-10 should be revised to be consistent.

In addition, the second paragraph of this section cites Figures D-46, D-47, and D-48. Apparently, Figures D-47, D-48, and D-49 should be cited instead. The text should be revised accordingly.

Finally, the text states that Tables D-7, D-9, D-10 and D-12 have been revised to include the latest analytical data. Table D-9 was not provided with the submittal and should be included for review. In addition, the text states that an error was found in Table D-7 for SWU-5-10-32 and has been corrected. However, information for SWU-5-10-32 appears to be unchanged. Table D-7 should be revised as described in the text.

Response: Noted.

Action: Text has been revised to read as follows:

"As shown in Table D-10, elevated total uranium concentrations were detected in SWU-5-43 [1030 milligrams per kilogram (mg/kg) or parts per million (ppm) at 17.5 to 18 feet, 1140 mg/kg at 18-18.5 feet, 2270 mg/kg at 18.5-19 feet, and 2390 mg/kg at 19-19.5 feet] and SWU-5-43A (3220 mg/kg at 18-18.5 feet). This was not unexpected since the boring was located approximately 1 foot southeast of SWU-5-15 which also exhibited elevated total uranium concentration (9090 ppm at 18.5 to 19 feet). The vertical extent of the above-WAC horizon exceeded that of SWU-5-15, however occurring at 558.76 feet mean sea level (msl)."

Reference to changes to figures has been deleted; addendum information was rolled into

the IRDP text (there is no need to point out differences between IRDP text/figures and Addendum text/figures).

The error in Table D-7 has been corrected; a revised Table D-7 is included in the IRDP resubmittal. Copies of all tables are also included in the IRDP resubmittal.

Commenting Organization: U.S. EPA  
Section #: 3.2  
Original Specific Comment #: 4

Commentor: Saric  
Line #: NA

Page #: 3-3

Comment: The text states that total lead concentrations exceeding 400 parts per million were detected from 0.5 to 1.0 foot below ground surface in one of four additional boreholes. The text should be revised to specify which borehole contained this lead concentration.

Response: Noted.

Action: Text has been revised to read as follows:

“Total lead concentrations above 400 ppm were found in one of the samples from the additional four locations: 1780 ppm detected in A2PIPB-34A at 0.5-1 foot.”

Commenting Organization: U.S. EPA  
Section #: Table D-10  
Original Specific Comment #: 5

Commentor: Saric  
Line #: NA

Page #: NA

Comment: The newly added information in this table includes pairs of sampling locations such as “SWU-5-41” and “SWU-5-EPA-41,” and “SWU-5-43” and “SWU-5-43A.” The table shows that these pairs have several sets of identical sampling depths with different analytical results. The addendum should be revised to explain the relationship between these pairs and the varying results.

Response: Noted. See response to Original Specific Comment #2.

Action: The A2PI Implementation Plan Appendix D text will be revised to discuss these issues (see response to Original Specific Comment #2).

Commenting Organization: U.S. EPA  
Figure #: Table D-13  
Original Specific Comment #: 6

Commentor: Saric  
Line #: NA

Page #: NA

Comment: The sampling depth of SP5-1-B2-R is stated to be 11.3 to 11.8 feet. However, based on procedures at other boreholes (for example, sampling location SP5-8) and the variance/field change notice, this depth should apparently be 10.2 to 10.7 feet. The actual depth of the sample should be checked and the table should be corrected as necessary.

Response: Noted.

Action: Table D-13 has been revised to read as follows:

SP5-1-B2-R 10.25-10.75