



Department of Energy

**Ohio Field Office
Fernald Closure Project
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JUL 7 2005

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

DOE-0281-05

Mr. Thomas Schneider, Project Manager
Ohio Environmental Protection Agency
Southwest District Office
401 East Fifth Street
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

**TRANSMITTAL OF REVISED RESPONSES TO COMMENTS ON THE DRAFT
EXCAVATION PLAN FOR AREA 6 WASTE PITS AND GENERAL AREA**

- References:
- 1) Letter, J. Saric to J. Reising, "Area 6 Waste Pits and General Area Excavation Plan," dated June 7, 2005
 - 2) Letter, T. Schneider to W. Taylor, "Disapproval - Excavation Plan for A6 Waste Pits and General Area," dated June 8, 2005
 - 3) Letter DOE-0265-05, W. Taylor to J. Saric/T. Schneider, "Transmittal of Responses to Comments on the Draft Excavation Plan for Area 6 Waste Pits and General Area," dated June 21, 2005
 - 4) Email, J. Chiou to T. Schneider, "FW: Area 6 Waste Pits and General Area Excavation Plan," dated June 28, 2005

Enclosed for your approval are the revised responses to Ohio Environmental Protection Agency (OEPA) comments on the draft Excavation Plan for Area 6 Waste Pits and General Area. Upon receipt of the comments from the U.S. Environmental Protection Agency (EPA) (Reference 1), and a disapproval letter with comments from OEPA (Reference 2) and subsequent submittal of responses to EPA and OEPA comments (Reference 3), a conference call was held on June 28, 2005 and documented in the above-referenced email (Reference 4). The original

Mr. James A. Saric
Mr. Thomas Schneider

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comment responses (Reference 3) have been revised to incorporate the resolutions described in the email. Notably, responses to Comments 10 and 27 have been revised with the revised text in bold and italicized. Fieldwork is being conducted according to the Excavation Plan and these revised comment responses with verbal approvals from both EPA and OEPA.

If you have any questions or require additional information, please contact Johnny Reising at (513) 648-3139.

Sincerely,


for William J. Taylor
Director

FCP:Reising

Enclosure

cc w/enclosure:

D. Pfister, OH/FCP
J. Reising, OH/FCP
T. Schneider, OEPA-Dayton (three copies of enclosure)
G. Jablonowski, USEPA-V, SR-6J
F. Bell, ATSDR
M. Cullerton, Tetra Tech
M. Shupe, HSI GeoTrans
R. Vandegrift, ODH
AR Coordinator, Fluor Fernald, Inc./MS78

cc w/o enclosure:

K. Alkema, Fluor Fernald, Inc./MS01
J. Chiou, Fluor Fernald, Inc./MS88
F. Johnston, Fluor Fernald, Inc./MS99
C. Murphy, Fluor Fernald, Inc./MS77
ECDC, Fluor Fernald, Inc./MS52-7

**REVISED RESPONSES TO
OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENTS
ON THE DRAFT EXCAVATION PLAN FOR
AREA 6 WASTE PITS AND GENERAL AREA**

**FERNALD CLOSURE PROJECT
FERNALD, OHIO**

JULY 2005

U.S. DEPARTMENT OF ENERGY

Action: The text of Section 2.3.1 will be revised to include a reference to the PSP for Predesign Sampling in Area 6 SP-7/OU1 Stockpile Area as well as the discussion related to the timing of the completion of this PSP. ***Additionally, a separate excavation plan will be submitted for review and approval for the footprint of SP-7 with sufficient characterization data of the underlying soil.***

11. Commenting Organization: OEPA Commentor: OFFO
Section #: 2.3.1 Pg #: 2-8 Line #: AWAC Area #10 Code: C
Original Comment #: 11

Comment: Line 3 stated that it is believed that the top liner maintained its integrity, yet in a TIE Meeting held with the agencies on May 24 it was stated that there are known holes in the top liner. Also, it was stated that the levels of above-WAC concentrations in the BSL are very high. Without any sampling results to prove that the secondary liner meets FRLs, it is unacceptable to send it to the OSDF. During the TIE Meeting sampling of the sand layer to verify the FRL status was mentioned. If DOE wants to send the bottom liner to the cell as below-WAC, please provide details on sampling of the sand layer to verify this.

Response: Agree. It is still believed that historically the top liner maintained its integrity. The Technical Information Exchange (TIE) Meeting was held after the sludge/sediment removal process began, and it is suspected that the holes in the liner were created during this removal process. Once the sludge/sediment and the top liner have been removed, samples of the underlying sand will be collected and analyzed to ensure that the sand and subsequent liner systems meet the OSDF WAC.

Action: The text of Sections 2.3.1 and 3.4.3.11 will be revised to incorporate language describing the sampling of the sand beneath the top liner of the Bionitrification Surge Lagoon (BSL) once the sludge/sediment and the top liner have been removed.

12. Commenting Organization: OEPA Commentor: OFFO
Section #: 2.3.1; 3.4.11 Pg #: 2-8; 3-10,11 Line #: 1-20; 6-15 Code: C
Original Comment #: 12

Comment: What measures will be taken to assure that there are no contaminated soils under the BSL? There is no evidence that any sampling has been done there. Also, we have addressed stormwater storage in unlined excavations in other documents. Water should be pumped out of unlined excavations that have not been certified. Only water that is free of contaminants can be pumped into unlined excavations that are certified. Without both conditions being met, there is a potential for adding contaminants to groundwater.

Response: The soil beneath both liner systems of the BSL will be sampled according to the PSP for the Predesign of Area 6 Subareas 3 and 4 to evaluate for FRL conditions after removal of the liner systems. After further consideration, DOE has decided that the BSL footprint will not be used for storage of impacted stormwater.

Action: This section will be rewritten to remove the language that discusses using the BSL as an impacted stormwater storage basin once the liner systems have been removed.

13. Commenting Organization: OEPA Commentor: OFFO
Section #: 2.3.2 Pg #: 2-8 Line #: Waste Pit 1 Code: C
Original Comment #: 13

Comment: This section states that there is above-FRL contamination located both in the floor and sidewalls of Waste Pit 1, which is bound vertically. It does not appear these areas are bound laterally. With no lateral bounding, this area has not been properly characterized for excavation.

18. Commenting Organization: OEPA Commentor: OFFO
Section #: 2.3.2 Pg #: 2-10 Line #: 27-32 Code: C
Original Comment #: 18

Comment: This section discussed historical locations for above-FRL samples, and states that samples were taken to vertically and laterally bound this location. It is then stated that the area is bound vertically. No mention is made of the lateral bounding locations. Therefore, OEPA concludes that the samples taken were insufficient to laterally bound this excavation. With no lateral bounding, this area has not been properly characterized for excavation.

Response: See Response to Comment No. 3.

Action: See Action to Comment No. 3.

19. Commenting Organization: OEPA Commentor: OFFO
Section #: 2.3.2 Pg #: 2-11 Line #: Clearwell Code: C
Original Comment #: 19

Comment: This section states above-FRL results were found and bound vertically in the sidewall and on the berm of the Clearwell. With no lateral bounding, this area has not been properly characterized for excavation.

Response: See Response to Comment No. 3.

Action: See Action to Comment No. 3.

20. Commenting Organization: OEPA Commentor: OFFO
Section #: 2.3.2 Pg #: 2-11 Line #: 33 Code: C
Original Comment #: 20

Comment: What depth was the arsenic found in the historical sample location WPA15? If this depth is deeper than the newer thorium contamination, sampling will still need to be done for the arsenic.

Response: Location WPA15 was above-FRL for arsenic at the 0 to 0.5-foot interval. This location is beneath the liner that held the surrogate from the Silos test operations that was analyzed and found to be above-FRL for thorium-232. The remainder of the surrogate, along with the liner and an additional 6 inches of soil will be removed from this area, which will be controlled for thorium-232. Arsenic will be retained as an area-specific constituent of concern for certification.

Action: Section 3 will be rewritten to provide the details for this removal of the liner in this area as well as the additional 6 inches.

21. Commenting Organization: OEPA Commentor: OFFO
Section #: 2.3.2 Pg #: 2-12 Line #: 17-19 Code: C
Original Comment #: 21

Comment: Was the area under the SWM pond characterized before the basin was put in? If not, how can DOE assume it to be below-FRL?

Response: Agree. Additional samples will be collected beneath the liner of the SWM Pond similar to the samples being collected for the BSL.

Action: The text of Section 2.3.2 will be revised to incorporate language describing the sampling of the sand beneath the top liner of the SWM Pond once the sludge/sediment and the liner have been removed.

22. Commenting Organization: OEPA Commentor: OFFO
Section #: 2.3.2 Pg #: 2-13 Line #: 10-11 Code: C
Original Comment #: 22

Comment: Has this area north of the former SWL been bound either vertically or laterally? How was the excavation size determined?

Response: The excavation size encompasses borings 11202, 11203, CIS_SYSGEN_882, and CIS_SYSGEN_879. Bounding to the south, southeast, and southwest was achieved by borings A6-SA3-71, A6-SA3-72, and CIS_SYSGEN_884 respectively. The designed borings for bounding to the north, northeast, and northwest (A6-SA3-70 and A6-SA3-30, A6-SA3-33, and A6-SA3-73) have not been collected due to the rail line. This will be performed as described in response to Comment No. 3.

Action: See Action to Comment No. 3.

23. Commenting Organization: OEPA Commentor: OFFO
Section #: 2.3.5 Pg #: 2-3 Line #: 32 Code: C
Original Comment #: 23

Comment: This sentence states that 'runoff from excavation areas will be allowed to enter certified areas'. It is never acceptable for water from excavation areas to enter certified areas. Please correct.

Response: This is actually Section 3.2.5, Page 3-3, Line 2-3. This statement is actually correct. The removal of the railroad tracks and underlying ballast material at the OU1 Railyard will be performed as "clean" work. As such runoff from this area will not require treatment at the Converted Advanced Waste Water Treatment Facility. Silt fence will be placed around the railyard and approaching track to control sediment in the runoff into two adjacent ditches that drain to Paddys Run. Hence, runoff will drain into certified areas. This is detailed in Section 3.3.4. However, the statement in Section 3.2.5 is misleading implying that runoff from excavations will be allowed to enter certified areas in general. This is not the case. The statement was meant to apply to the OU1 railyard excavation only.

Action: The sentence in question will be removed from Section 3.2.5.

24. Commenting Organization: OEPA Commentor: DSW
Section #: 3.3.1 Pg #: 3-3 Line #: 20-30 Code: C
Original Comment #: 24

Comment: There needs to be a contingency if you are unable to pump to the Cement Pond. This has been known to fill (and overflow) from the perimeter drain feeding it. It is possible that a rain event or series of rain events would fill this and render it unavailable to pump to. It is noted that the current version of the site OMMP states that "Several gasoline powered pumps have been temporarily staged at this sump (Cement Pond) in order to provide additional pumping capacity as needed to counter the decrease in permanently installed pumping capacity. These pumps will be used to relay pump the water to the former Waste Pit 1 excavation if needed. Water temporarily stored in the Pit 1 excavation will be routed back to the cement pond after the storm event ceases. This mode of operation will be utilized until sufficient drainage area has been routed away from the sump." Is this part of the Area 6 storm water contingency as well?

Response: Yes. The emergency pump location for the Cement Pond is the Waste Pit 1 footprint via use of temporary pumps.

Response: Interim restoration is performed at the completion of excavation and does not address final restoration, unless specifically included in the design otherwise. In this case it has not. As such, a final restoration design will be developed for this area and submitted to the agency for review. Interim restoration is necessary to assist the precertification process. It assists with vehicular access to the areas and real-time monitoring.

Section 02006 Items 3.2 A. and 3.2.E. apply to this design; however, large scale backfilling or GMA plug in the Waste Pits Area is not required.

Action: None.