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Ohio Field Office  
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5114

OCT 24 2003

Mr. James A. Saric, Remedial Project Manager  
United States Environmental Protection Agency  
Region V, SR-6J  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

DOE-0027-04

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

Dear Mr. Saric and Mr. Schneider:

**TRANSMITTAL OF RESPONSES TO COMMENTS ON THE DRAFT AREA 7, PHASE I  
POST-EXCAVATION AS-BUILT REPORT**

- References:
1. Letter, J. Saric to J. Reising, "A7 Phase 1 Post-Excavation As-Built Report," dated July 9, 2003
  2. Letter, T. Schneider to J. Reising, "Post-Excavation As-Built Report for Area 7, Phase I," dated July 25, 2003

Enclosed for your approval are responses to the United States Environmental Protection Agency (USEPA) and Ohio Environmental Protection Agency (OEPA) comments on the draft Post-Excavation As-Built Report for Area 7, Phase I.

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

Sincerely,

*for Johnny Reising*  
Glenn Griffiths  
Acting Director

FCP:Reising

Enclosures: As Stated

OCT 24 2003

DOE-0027-04

Mr. James A. Saric  
Mr. Tom Schneider

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## cc w/enclosures:

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

## cc w/o enclosures:

R. Greenberg, EM-31/CLOV  
N. Hallein, EM-31/CLOV  
K. Johnson, OH/FCP  
R. Abitz, Fluor Fernald, Inc./MS64  
D. Arico, Fluor Fernald, Inc./MS64  
J. Chiou, Fluor Fernald, Inc./MS64  
T. Hagen, Fluor Fernald, Inc./MS1  
K. Harbin, Fluor Fernald, Inc./MS60  
F. Miller, Fluor Fernald, Inc./MS64  
C. Neumann, Fluor Fernald, Inc./MS64  
D. Powell, Fluor Fernald, Inc./MS64  
R. Reynolds, Fluor Fernald, Inc./MS64  
T. Poff, Fluor Fernald, Inc./MS65-2  
W. Zebick, Fluor Fernald, Inc./MS60  
ECDC, Fluor Fernald, Inc./MS52-7

**RESPONSES TO U.S. ENVIRONMENTAL PROTECTION AGENCY'S  
TECHNICAL REVIEW COMMENTS ON THE  
DRAFT POST-EXCAVATION AS-BUILT REPORT FOR AREA 7, PHASE I  
(20501-RP-0001, REVISION A)**

**FERNALD CLOSURE PROJECT  
FERNALD, OHIO**

**OCTOBER 23, 2003**

**U.S. DEPARTMENT OF ENERGY**

**RESPONSES TO U.S. ENVIRONMENTAL PROTECTION AGENCY'S  
TECHNICAL REVIEW COMMENTS ON THE  
DRAFT POST-EXCAVATION AS-BUILT REPORT FOR AREA 7, PHASE I  
(20501-RP-0001, REVISION A)**

**FERNALD CLOSURE PROJECT**

**GENERAL COMMENTS**

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: Not Applicable (NA)

Page #: NA

Line #: NA

Original General Comment #: 1

**Comment:** The activities described in the Post-Excavation As-Built Report for Area 7, Phase I (A7PI) are the last activities to occur before Area 7 is turned over to the Silos Project for construction of remediation facilities, a warehouse, and other supporting infrastructure. Future remediation activities for Area 7 during Phases II and II are not to occur until 2006. The report should be revised to provide (1) a chronology of events that have occurred to date in Area 7 and a summary of associated sampling results and (2) references to other reports that contain additional detailed information on Area 7. For example, the chronology should state that predesign waste acceptance criteria (WAC) attainment sampling occurred in 2000, excavation activities occurred in 2002, precertification sampling occurred in 2002, and so on. This chronology will provide the reader with a transition from the past sampling and excavation activities to the future remediation activities.

**Response:** Agree. Section 2 will be revised to provide a list of the past characterization documents related to this area and include the chronology. This information will include the following:

Past Document Submittals:

- Project Specific Plan for WAC Attainment Sampling of Area 7 Soils – *Sampled 10/4/98*
  - Variances to plan for Predesign of A7PI (FRL sampling) – *Sampled 3/12/02*
  - Variances to plan for A7PI Predesign of K-65 Trench (WAC/FRL) – *Sampled 3/21/02*
- Area 7 Excavation Plan, Phase I – *Performed 5/21/02 through 11/14/02*
- Project Specific Plan for Area 7, Phase I Precertification Physical Sampling and Real-Time Scan
  - *Real-Time Scans performed 9/17/02 through 11/14/02*
  - *Precertification Physical Samples performed 9/11/02 through 10/14/02*

Planned Document Submittals:

- Predesign Sampling Project Specific Plan Phase II and Phase III
- Certification Activities Phase II
- Certification Activities Phase III

**Action:** Incorporate the above information into Section 2.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: NA

Page #: NA

Line #: NA

Original General Comment #: 2

**Comment:** The report discusses soil characterization results and often refers to another report, table, or figure. When discussing soil sample analytical results, the text should summarize the constituents of concern (COCs), final remediation levels (FRLs), and WAC, as well as the sampling locations where COC concentrations exceeded FRLs or WAC during each sampling event. This information will help the reader understand the report without having to refer to other documents that may not be readily available.

Response: Agree.

Action: The text will be revised to discuss COCs, FRLs, WAC, as well as provide figures that show locations of samples that contain above-FRL COCs that were not remediated.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: NA

Page #: NA

Line #: NA

Original General Comment #: 3

Comment: The report often states that excavation changes occurred for various reasons. For each excavation change, the report should state whether a document change notice (DCN) or field change notice (FCN) variance was submitted.

Response: Based on OEPA's conditional approval letter for Area 7 Excavation Plan, Phase I, dated July 12, 2002, which requested the preparation of a Post-Excavation Report to include "as-built" contours, other sampling information, and future phases of remediation, all modifications to the plan were to be documented in the Post-Excavation As-Built Report for Area 7, Phase I. Alterations to the Excavation Plan were discussed between Construction, Engineering, and Characterization through internal processes and followed up with updates to Figure 1 of the Excavation Plan that guided the field remedial effort. Therefore, DCNs and FCNs were not completed. All of the information was then incorporated into the Post-Excavation As-Built Report.

Action: None.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: NA

Page #: NA

Line #: NA

Original General Comment #: 4

Comment: The report refers to storm water diversions and changes in flow patterns that occurred during excavation activities. The locations of the diversions are difficult to understand because reference points discussed in the text are not shown in a figure. The report should be revised to include a figure showing the locations where storm water diversions and changes in flow patterns occurred during excavation activities.

Response: Agree.

Action: The locations will be identified on Figure 1-1 and other features discussed in the report will either be added to Figure 1-1 or Drawing 99X-5500-G-00784 to provide clarity.

#### SPECIFIC COMMENTS

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 1.1

Page #: 1-1

Line #: 17 through 25

Original Specific Comment #: 1

Comment: The text discusses six distinct areas for A7PI. However, the six areas are not labeled in Figure 1-1. Figure 1-1 should be revised to show the six distinct areas for A7PI and other features discussed in the report.

Response: Agree.

Action: The areas will be identified on Figure 1-1 and other features discussed in the report will either be added to Figure 1-1 or Drawing 99X-5500-G-00784 to provide clarity.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 2.1

Page #: 2-2

Line #: 13

Original Specific Comment #: 2

**Comment:** The text states that additional excavation was performed by the Silos Project in the Remediation Facility footprint. The text should state whether the additional excavation was performed below the proposed elevation of 570 feet above mean sea level (amsl) and whether any DCN or FCN variances were submitted for this additional excavation.

**Response:** Yes, additional excavation was performed below elevation 570 feet amsl by Silos construction as required to construct the Remediation Facility foundations. This material was taken to the OSDF. No DCNs or FCNs were submitted because this additional excavation was planned for under Silos scope of work and outside of the scope of the Soil and Disposal Facility Project.

**Action:** None.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 2.2

Page #: 2-3

Line #: 8 and 9

Original Specific Comment #: 3

**Comment:** The text states that the proposed limit of excavation in the southwest corner of the High Nitrate Tank area required exclusion because of the presence of active electric utilities. The text should be revised to define the extent of the exclusion area and to state whether any DCN or FCN variances were submitted for this change.

**Response:** The southwest corner of the High Nitrate Tank limit (formerly the intersection of the southern and western limits of the High Nitrate Tank excavation) of removal was relocated north (25 feet) and east (30 feet) to eliminate the corner where the active electric lines and transformer reside to allow Silos personnel to continue to use it. The difference between the original limit of excavation from the Area 7 Excavation Plan, Phase I and the Post-Excavation As-Built Report for Area 7, Phase I can be viewed on Drawing 99X-5500-G-00784 by comparing the "proposed limit of excavation" to the as-built contours. See also response to General Comment No. 3.

**Action:** Section 2 will be revised to incorporate the information as stated in the response.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 2.3

Page #: 2-4

Line #: 18 and 19

Original Specific Comment #: 4

**Comment:** The text states that wastewater was pumped from the K-65 Trench and discharged directly onto the existing pile of soil at Stockpile 7 (SP-7). The text should be revised to specify the volume of wastewater discharged and to explain how runoff was controlled at Stockpile 7.

**Response:** The statement in the report was incorrect. Upon further discussions with Waste Acceptance Organization and Advanced Wastewater Treatment (AWWT) Facility personnel, the statement should have read as follows:

"The excess water from washing the residual sediments from the K-65 Trench were collected by the Super-sucker truck and transported and discharged at the AWWT. The remaining sediments were hand excavated by the same process as the bulk sediments and were transported and disposed at SP-7."

**Action:** Section 2 will be revised to incorporate the information as stated in the response.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 2.5

Page #: 2-7

Line #: 4 and 5

Original Specific Comment #: 5

**Comment:** The text states that the southern limit of excavation for the Railroad Embankment was relocated approximately 200 feet to the north because of the presence of overhead electric lines and power poles. The text should be revised to explain whether this change resulted in contaminated soil being left in place. Also, the text should be revised to state whether a DCN or FCN variance was submitted.

**Response:** The railroad ballast was removed from the area. No soil excavation was performed as part of Phase I remediation. This area was scanned by real-time as shown on Figures 3-8 through 3-11 and the results indicate that no radiologically contaminated soil remained. Also, the only physical sample (A7-HR23) in the area that showed greater than FRL results was remediated as this sample was located just north of the southern soil excavation boundary. Completion of this specific excavation was confirmed with physical sample A7-PC7.

**Action:** Section 2 will be revised to incorporate the information as stated in the response.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 2.6

Page #: 2-7

Line #: 20 through 22

Original Specific Comment #: 6

**Comment:** The text states that the southern limit of removal for the Impacted Material Haul Road was relocated to the north to coincide with the southern limit excavation for the High Nitrate Tank footprint. This change was made to allow Silos Project personnel to continue to use the area for access and parking. The text should be revised to state whether a DCN or FCN variance was submitted for the relocation.

**Response:** See response to General Comment No. 3.

**Action:** None.

**RESPONSES TO OHIO ENVIRONMENTAL PROTECTION AGENCY'S  
COMMENTS ON THE DRAFT POST-EXCAVATION AS-BUILT REPORT  
FOR AREA 7, PHASE I  
(20501-RP-0001, REVISION A)**

**FERNALD CLOSURE PROJECT  
FERNALD, OHIO**

**OCTOBER 23, 2003**

**U.S. DEPARTMENT OF ENERGY**

**RESPONSES TO OHIO ENVIRONMENTAL PROTECTION AGENCY'S COMMENTS  
ON THE DRAFT POST-EXCAVATION AS-BUILT REPORT FOR AREA 7, PHASE I  
(20501-RP-0001, REVISION A)**

**FERNALD CLOSURE PROJECT**

Commenting Organization: Ohio EPA  
Section #: General Pg. #: Line #: Commentator: OFFO  
Original Comment #: 1 Code: C

Comment: When Ohio EPA requested that DOE provide us with an As-Built Report we anticipated a document that outlined all activities that took place during Phase I, and a document that could be used as a reference for Phase II and III. In saying that, Ohio EPA agrees with U.S. EPA's first comment to DOE. It would seem appropriate to have a "chronology of events" that occurred in Area 7 including a summary of all sampling results and references to other reports that contain information on Area 7.

Response: Agree. Section 2 will be revised to provide a list of the past characterization documents related to this area and include the chronology. This information will include the following:

Past Document Submittals:

- Project Specific Plan for WAC Attainment Sampling of Area 7 Soils – *Sampled 10/4/98*
  - Variances to plan for Predesign of A7PI (FRL sampling) – *Sampled 3/12/02*
  - Variances to plan for A7PI Predesign of K-65 Trench (WAC/FRL) – *Sampled 3/21/02*
- Area 7 Excavation Plan, Phase I – *Performed 5/21/02 through 11/14/02*
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  - *Real-Time Scans performed 9/17/02 through 11/14/02*
  - *Precertification Physical Samples performed 9/11/02 through 10/14/02*

Planned Document Submittals:

- Predesign Sampling Project Specific Plan Phase II and Phase III
- Certification Activities Phase II
- Certification Activities Phase III

Action: Incorporate the above information into Section 2.

Commenting Organization: Ohio EPA  
Section #: Figure 1-1 Pg. #: Line #: Commentator: OFFO  
Original Comment #: 2 Code: C

Comment: Figure 1-1 should have the precise areas marked within the excavation boundaries and any other specifics discussed in the document so the figure would provide a better perspective of Area 7.

Response: Agree.

Action: The areas will be identified on Figure 1-1 and other specifics discussed in the document will either be added to Figure 1-1 or Drawing 99X-5500-G-00784 to provide clarity.

Commenting Organization: Ohio EPA  
 Section #: 2.3 Pg. #: 2-4 Line #: 18-19 Commentator: OFFO  
 Code: C  
 Original Comment #: 3

Comment: Why was the waste water pumped out of the K-65 Trench and discharged onto SP-7 and not into the Bio-Surge Lagoon? This is an entirely inappropriate activity and should not occur again. Collected storm water should be sent to the AWWT via the SWRB or the Bio-Surge Lagoon.

Response: The statement in the report was incorrect. Upon further discussions with Waste Acceptance Organization and Advanced Wastewater Treatment (AWWT) Facility personnel, the statement should have read as follows:

“The excess water from washing the residual sediments from the K-65 Trench were collected by the Super-sucker truck and transported and discharged at the AWWT. The remaining sediments were hand excavated by the same process as the bulk sediments and were transported and disposed at SP-7.”

Action: Section 2 will be revised to incorporate the information as stated in the response.

Commenting Organization: Ohio EPA  
 Section #: 2.5 Pg. #: 2-7 Line #: 2-6 Commentator: OFFO  
 Code: C  
 Original Comment #: 4

Comment: This paragraph states that southern end of the excavation was “relocated approximately 200 feet north” due to overhead power and electric poles being in the excavation area. How was the original southern boundary remediated, and was any contamination found?

Response: The railroad ballast was removed from the area. No soil excavation was performed as part of Phase I remediation. This area was scanned by real-time as shown on Figures 3-8 through 3-11 and the results indicate that no radiologically contaminated soil remained. Also, the only physical sample (A7-HR23) in the area that showed greater than FRL results was remediated as this sample was located just north of the southern soil excavation boundary. Completion of this specific excavation was confirmed with physical sample A7-PC7.

Action: Section 2 will be revised to incorporate the information as stated in the response.

Commenting Organization: Ohio EPA  
 Section #: 2.6 Pg. #: 2-7 Line #: 19-23 Commentator: OFFO  
 Code: C  
 Original Comment #: 5

Comment: How far north was the southern end of the excavation relocated? Please explain how this changed the initial excavation plan? Was the “southern limit” scanned for possible contamination, along with the rest of the excavation area?

Response: The southern limit of the Impacted Material Haul Road (IMHR) removal (formerly the intersection of the IMHR with the Silos Crossing) was relocated north (approximately 270 feet) to coincide with the southern limit of excavation for the High Nitrate Tank footprint to allow Silos personnel to continue to use it for access and personnel parking. The difference between the original limit of excavation from the Area 7 Excavation Plan, Phase I and the Post-Excavation As-Built Report for Area 7, Phase I can be viewed on Drawing 99X-5500-G-00784 by comparing the “proposed limit of excavation” to the as-built contours. The area south of the actual excavation boundary was not scanned because the pavement was not excavated. The asphalt of the IMHR remains in place and will be removed as part of Phase II as discussed in Section 4.0.

Action: None.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 3.2.1

Pg. #: 3-2

Line #: 10-15

Code: C

Original Comment #: 6

Comment: DOE continues to backfill at risk before receiving sample confirmation with the commitment to re-excavate, if above-FRL results come back. Why was the above-FRL soil sample location, A7-K12, not excavated to attain FRLs? Ohio EPA expects to have these areas remediated and follow up documentation in place. When will this above-FRL area and other locations in Area 7, mentioned in this document, be remediated and which phase will this occur?

Response: Sample point A7-K12 was located adjacent to the main utility corridor that runs lengthwise beneath the Impacted Material Haul Road. It was not originally included in the excavation plan because the data was not received prior to submitting the plan due to delay of sampling caused by the proximity of the utilities. When the data, which identified above-FRL conditions at depth for A7-K12, was received it was decided that the removal of this contamination couldn't be done without impacting the utilities and would need to be done concurrent with the future excavation of the main utility corridor (Phase III). Therefore, no change in the excavation plan was implemented. The other locations that exhibit above-FRL contamination will be excavated under Phase II.

Action: A figure will be added that depicts all locations that exhibit above-FRL conditions but were not remediated as part of A7PI Excavation Plan.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: Figures 4-3 and 4-4 Pg. #:

Line #:

Code: C

Original Comment #: 7

Comment: The areas described in the text should be marked on both Figures 4-3 and 4-4 for clarity and future reference.

Response: Agree.

Action: Figures 4-3 and 4-4 will be revised for clarity and future reference.