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AUG 20 2002

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

DOE-0664-02

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 AND THE REVISED PROJECT SPECIFIC
PLAN FOR PREDESIGN INVESTIGATION IN AREA 5**

- References: 1. Letter, J. Saric to J. Reising, "A5 Predesign Investigation PSP," dated July 25, 2002
2. Letter, T. Schneider to J. Reising, "PSP for Predesign Investigation in Area 5," dated July 29, 2002

Enclosed for your approval are responses to the United States Environmental Protection Agency and Ohio Environmental Protection Agency comments and the revised Project Specific Plan (PSP) for Predesign Investigation in Area 5. This PSP has been revised to include the comment responses from the references listed above. This plan addresses the investigation of material that has the potential to be above the final remediation levels.

If you have any questions or need further information, please contact Robert Janke at (513) 648-3124.

Sincerely,

Johnny W. Reising
Fernald Remedial Action
Project Manager

FEMP:R.J. Janke

Enclosure: As Stated

Mr. James A. Saric
Mr. Tom Schneider

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DOE-0664-02

cc w/enclosures:

T. Schneider, OEPA-Dayton (three copies of enclosure)
M. Cullerton, Tetra Tech
AR Coordinator, Fluor Fernald, Inc./MS78

cc w/o enclosures:

R. Greenberg, EM-31/CLOV
R. J. Janke, OH/FEMP
A. Tanner, OH/FEMP
D. Carr, Fluor Fernald, Inc./MS2
J. D. Chiou, Fluor Fernald, Inc./MS64
E. Kroger, Fluor Fernald, Inc./MS64
A. Madani, Fluor Fernald, Inc./MS64
F. Miller, Fluor Fernald, Inc./MS64
T. Poff, Fluor Fernald, Inc./MS52-7
ECDC/52-7

**RESPONSES TO U.S. ENVIRONMENTAL PROTECTION AGENCY
TECHNICAL REVIEW COMMENTS ON THE DRAFT PROJECT
SPECIFIC PLAN FOR PREDESIGN INVESTIGATION IN AREA 5
(20810-PSP-0005, REVISION A)**

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

SPECIFIC COMMENTS

Commenting Organization: U.S. EPA
Section #: 2.1.1 and Figure 2-1
Original Specific Comment #: 1
Page #: 2-1
Commentor: Saric
Line #: NA
Comment: The text states that Area 5 was divided into 26 grid blocks of approximately 60,000 square feet, resulting in 92 sampling locations. Figure 2-1 shows the sampling locations but not the grid blocks. Figure 2-1 should be revised to include grid block divisions.

Response: Agree.

Action: Grid block boundary lines will be added to Figure 2-1.

Commenting Organization: U.S. EPA
Section #: 2.1.1
Original Specific Comment #: 2
Page #: 2-2
Commentor: Saric
Line #: 1-5
Comment: The text states that three-fourths of the samples collected will be analyzed for target analyte list (TAL) A, and that the remainder will be analyzed for TAL B. No rationale is given for the selection of analytes on each list. The text should be revised to explain the basis for this selection.

Response: TAL A includes the five primary radiological constituents of concern (COCs) identified in the Sitewide Excavation Plan (SEP) for all remediation areas. TAL B includes the five primary radiological COCs, plus arsenic, beryllium, aroclor-1254 and aroclor-1260, which represent the four secondary COCs for Area 5 (per the SEP) that are likely to be carried over into the certification process. This rationale is provided in Section 2.1.1 of the draft Project Specific Plan (PSP; Page 2-2, Lines 10-12).

Action: No action required.

Commenting Organization: U.S. EPA
Section #: 2.1.3
Original Specific Comment #: 3
Page #: 2-2
Commentor: Saric
Line #: 1-5
Comment: The text states that soil located around boring 11109 will be excavated to achieve the "safe slope" during excavation beneath the Health and Safety Building and that no further sampling is required. The text does not identify the depth of contamination in boring 11109 nor the depth of the "safe slope" excavation. The text should be revised to include this information.

Response: DOE agrees to add this information to the PSP. It is also detailed in the response to Ohio EPA Comment No. 7.

Action: Information will be added on the planned excavation depth in the vicinity of boring 11109 to the PSP, Section 2.1.3.

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**RESPONSES TO OHIO ENVIRONMENTAL PROTECTION AGENCY
COMMENTS ON THE DRAFT PROJECT SPECIFIC PLAN
FOR PREDESIGN INVESTIGATION IN AREA 5
(20810-PSP-0005, REVISION A)**

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

SPECIFIC COMMENTS

Commenting Organization: Ohio EPA
Section #: 2.0 Pg. #: Line #: Commentator: OFFO
Code: C
Original Comment #: 1

Comment: Due to the lack of previous sampling and process activities in the area (asphalt, electrical substation, vehicles), PAH's should be added to the analyte list to ensure potential FRL exceedances are defined.

Response: DOE agrees to add analysis for polyaromatic hydrocarbons (PAHs) in Area 5.

Action: PAHs will be added to the target analyte list (TAL) for all A5P samples (24 samples in the electrical substation area). Also add PAH analysis to samples collected at 10 borings (and therefore, 20 samples) throughout the East and West Parking Lots (in A5A).

Commenting Organization: Ohio EPA
Section #: 2.1.1 Pg. #: 2-1 Line #: 27-29 Commentator: OFFO
Code: C
Original Comment #: 2

Comment: The sampling protocol described for "paved and unpaved locations," appears to be lacking a couple steps in the procedure. For sample locations with overlying material, Ohio EPA believes that the depth of the sample must be taken to native soil. In addition, there is no mention of scanning the surface-sample location, but surveying soil cores is discussed. Please clarify.

Response: Agree that sampling should be conducted to native soil. Also, OEPA is correct that surface samples will not be scanned with the beta-gamma frisker. The main purpose for the beta-gamma frisk of the soil cores is to verify that no isolated contamination is missed since not all samples from the core will be collected and analyzed. Since all surface soil samples will be analyzed for primary radiological constituents of concern, this scan will not provide any additional information.

Action: Add the following provision to Section 2.2 of the PSP:

"Since fill soil may also be present beneath the parking lot, a Geologist must verify that sampling is conducted to native soil at each boring location. If the deepest identified sample does not contain native soil, the boring will be continued until native soil is reached, and an additional sample will be collected from the first 6-inch increment containing all native soil. This sample will be analyzed for the same TAL as other samples collected from that boring (see Appendix C)."

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Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 2.1.1

Pg. #: 2-1

Line #: 30-35

Code: C

Original Comment #: 3

Comment: What will be done if the Geoprobe® cannot recover sufficient sample volume for the sample? Specifically, the existence of a sub-base for the parking lot could make recovery difficult.

Response: Additional volume will be collected by an additional, side-by-side push. Per Section 2.2 of the draft PSP (Page 2-5, Lines 23 and 24), "If a 6-inch interval contains insufficient soil mass for the necessary analyses, additional material can be obtained by performing an additional push." Also of note, samples will be collected from beneath the gravel sub-base of the parking lot (i.e., overlying material).

Action: No action required.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 2.1.1

Pg. #: 2-2

Line #: 7-9

Code: C

Original Comment #: 4

Comment: What information is available relating to the "clean fill?" How was the fill verified as clean? Where did the clean soil come from and how long ago was the soil used to backfill the old trailer area? What measures were taken to avoid contamination in this area post-fill placement? If the soil is not sampled, where will DOE dispose of it?

Response: This soil was brought in from an off-site location in late 2001 to backfill a small depression in the area formerly occupied by Trailer 38. Due to the origin and recent placement, there is no reason to suspect it has been impacted. Regardless, according to the remediation plans in Area 5 this soil (along with all surface soil) will be removed from Area 5, and disposed of in the On-Site Disposal Facility (OSDF).

Action: The PSP will be updated to include information described in the comment response, above.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 2.1.2

Pg. #: 2-2

Line #: 7-9

Code: C

Original Comment #: 5

Comment: A number of ditches exist within A5A-EF that do or previously did receive drainage from the Former Production Area. Biased samples should be located along these streams as well as those around the previously mentioned SSOD area.

Response: DOE agrees to bias some samples to investigate potential impacts to A5A-EF resulting from the drainage it receives from the Former Production Area. For clarification, there are two major drainage ditches in A5A-EF. The southern A5A-EF ditch receives drainage from the east, and what is now the Borrow Area. The northern A5A-EF ditch receives drainage from the north, including the eastern edge of the Former Production Area. Of note, the Storm Sewer Outfall Ditch (SSOD) area is not part of Area 5 (see response to Ohio EPA Comment No. 8).

Action: Two samples specified in the PSP (A5A-EF16 and A5A-EF19) that are in close proximity to the northern A5A-EF ditch will be moved into the base of the ditch. In addition, three deep borings will be added at the western edge of this ditch where some ponding occurs before the drainage enters the culvert. These borings will provide information on the potential vertical migration of contamination near in this area.

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Commenting Organization: Ohio EPA

Section #: 2.1.3

Pg. #: 2-3

Line #: 1-2

Commentator: OFFO

Code: C

Original Comment #: 6

Comment: Based upon the available information and presentation, it is unclear if the existing data is sufficient to properly scope the IRDP for A5P. With the development of more useful modeling schematics, it is likely to become evident more data is required in this area. DOE should keep this in mind when developing the IRDP and be prepared to collect additional data in the area.

Response: DOE agrees with Ohio EPA, and recognizes that more sampling data may be needed to refine planned remedial excavations in Area 5 after these data have been reviewed and the planned excavation model has been refined.

Action: No action required.

Commenting Organization: Ohio EPA

Section #: 2.1.3

Pg. #: 2-3

Line #: 1-2

Commentator: OFFO

Code: C

Original Comment #: 7

Comment: Although the soil around boring 11109 will be excavated, shouldn't DOE collect samples to determine the extent of contamination, i.e., bound? Ohio EPA takes issue with deleting boring location 11109 from the sampling round and believes it should be included to confirm the historical data and extent.

Response: The final remediation level (FRL) exceedances at RI/FS boring 11109 were for beryllium (1.8 mg/kg; FRL = 1.5 mg/kg) at a depth of 1 to 1.5 feet, and radium-226 (2.0 pCi/g; FRL = 1.7 pCi/g) at a depth of 2.5 to 3 feet. The planned soil excavations in the vicinity of this boring extend to approximately 8 feet below surface, and this excavation depth will extend to nearly 100 feet from boring 11109 in the nearest direction (south). This large excavation is necessary to capture building foundations, underground utilities, and to allow for drainage corridors and safe slope. As a result, this effectively eliminates the need to bound this boring since the soil in this area will be excavated and disposed in the OSDF regardless of the results. Also, it is important to note that beryllium will be retained as an Area 5 area-specific constituent of concern, and a dense sampling effort will take place during the certification phase to verify that the above-FRL contamination has been remediated.

Action: No action required.

Commenting Organization: Ohio EPA

Section #: Figure 2-1

Pg. #:

Line #:

Commentator: OFFO

Code: C

Original Comment #: 8

Comment: Figure 2-1 shows the southern portion of Area 5 outlying the SSOD and tributaries near the Stormwater Retention Basins. No samples are proposed in this area, though it appears to lie within the area defined as A5. Sampling should be conducted in this area.

Response: Figure 2-1 is misleading. The SSOD is not part of Area 5, but rather part of the Paddys Run/Storm Sewer Outfall Ditch Corridor, and therefore, is not part of this Area 5 investigation. Also note that the A5 boundary was revised (moved west about 10 feet to the eastern edge of the North Access Road) to match the boundary used for A1PII certification.

Action: Figure 2-1 (as well as the other figures) will be revised to properly identify the Area 5 boundary.