




**Department of Energy**  
**Ohio Field Office**  
**Fernald Environmental Management Project**  
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JUL 20 2004

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-0331-04

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

Dear Mr. Saric and Mr. Schneider:

**TRANSMITTAL OF RESPONSES TO ADDITIONAL COMMENTS ON THE REVISED PROJECT SPECIFIC PLAN FOR DIRECT-PUSH GROUNDWATER SAMPLING IN FORMER SOIL EXCAVATION AREAS**

- References:
- 1) Letter DOE-0173-04, W. Taylor to J. Saric/T. Schneider, "Transmittal of the Project Specific Plan for Direct-Push Groundwater Sampling in Former Soil Excavation Areas - Fernald Closure Project," dated March 8, 2004
  - 2) Letter, J. Saric to J. Reising, "Direct-Push Groundwater PSP," dated April 6, 2004
  - 3) Letter, T. Schneider to W. Taylor, "Comments on PSP for Groundwater Sampling in Areas 3A/4A," dated April 9, 2004
  - 4) Letter DOE-0289-04, W. Taylor to J. Saric/T. Schneider, "Transmittal of Responses to Comments and the Revised Project Specific Plan for Direct-Push Groundwater Sampling in Former Soil Excavation Areas," dated June 1, 2004.
  - 5) Letter, T. Schneider to W. Taylor, "Disapproval of the PSP for Direct-Push Sampling in Areas 3A/4A," dated June 22, 2004
  - 6) Letter, J. Saric to J. Reising, "Direct-Push Groundwater PSP RTC," dated June 22, 2004

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Mr. James A. Saric  
Mr. Tom Schneider

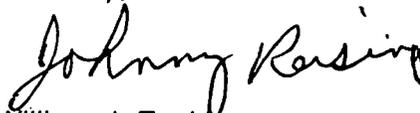
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DOE-0331-04

Enclosed for your review and approval are responses to the Ohio Environmental Protection Agency (OEPA) disapproval (Reference 5) of the revised Project Specific Plan for Direct-Push Groundwater Sampling in Former Soil Excavation Areas (Reference 4). This document was approved by the United States Environmental Protection Agency (USEPA) as noted in Reference 6.

If you have any questions concerning the enclosed documents, please contact Dave Lojek at (513) 648-3127.

Sincerely,

*for*   
William J. Taylor  
Director

FCP:Lojek

Enclosures: As Stated

cc w/enclosures:

D. Lojek, OH/FCP

J. Reising, OH/FCP

G. Jablonowski, USEPA-V, SR-6J

M. Murphy, USEPA-V, AE-17J

T. Schneider, OEPA-Dayton (total of 3 copies of enclosures)

F. Bell, ATSDR

M. Cullerton, TetraTech

M. Shupe, HSI GeoTrans

R. Vandergrift, ODH

AR Coordinator, Fluor Fernald, Inc./MS78

cc w/o enclosures:

N. Akgündüz, OH/FCP

K. Johnson, OH/FCP

R. Abitz, Fluor Fernald, Inc./MS64

K. Alkema, Fluor Fernald, Inc./MS1

K. Broberg, Fluor Fernald, Inc./MS52-5

J. Chiou, Fluor Fernald, Inc./MS64

T. Hagen, Fluor Fernald, Inc./MS1

W. Hertel, Fluor Fernald, Inc./MS52-5

M. Jewett, Fluor Fernald, Inc./MS52-5

M. Kopp, Fluor Fernald, Inc./MS52-5

S. Lorenz, Fluor Fernald, Inc./MS41

F. Miller, Fluor Fernald, Inc./MS64

C. Murphy, Fluor Fernald, Inc./MS1

T. Poff, Fluor Fernald, Inc./MS65-2

D. Powell, Fluor Fernald, Inc./MS64

C. Tabor, Fluor Fernald, Inc./MS90

ECDC, Fluor Fernald, Inc./MS52-7

**RESPONSES TO COMMENTS ON THE  
REVISED PROJECT SPECIFIC PLAN FOR  
DIRECT-PUSH GROUNDWATER SAMPLING IN  
THE FORMER SOIL EXCAVATION AREAS  
(REVISION 1)**

**FERNALD CLOSURE PROJECT  
FERNALD, OHIO**

**JULY 2004**

**U.S. DEPARTMENT OF ENERGY**

**RESPONSES TO COMMENTS ON THE REVISED  
PROJECT SPECIFIC PLAN FOR DIRECT-PUSH GROUNDWATER SAMPLING  
IN THE FORMER SOIL EXCAVATION AREAS**

**ORIGINAL GENERAL COMMENT**

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

Comment: The borings that are located at the bottoms of the excavations should be relocated. They should be moved to the east so that they are on the berms and not the bottoms of the excavations.

Response: The borings that were located on the bottom of the excavations (Locations 13311, 13314, and 13315) have been relocated. They are now situated outside the deep excavations in areas where water does not pond. Figure 1 has been updated and attached to these comment responses to show the new locations. In the Plant 9 area, moving Location 13311 east put it very close to Location 13312. It was, therefore, decided to move Location 13312 to a new location north of 13311. In the Plant 6 area, moving Location 13313 east placed it right next to Location 13314. Therefore, location 13313 was moved to the south of Location 13314.

Action: As stated in the response.

2. Commenting Organization: Ohio EPA  
Section #: Pg.#: Line #: Commentor: OFFO  
Code: G  
Original General Comment #: 2

Comment: Locations of all borings (including borings from previous projects) should be located on a master map that can be used by the Remediation Project to avoid both damaging plugged boreholes and prevent locating basins above them.

Response: A "master map" showing all borings into the Great Miami Aquifer in the Production Area will be produced.

Action: As stated in the response.

**ORIGINAL SPECIFIC COMMENTS**

1. Commenting Organization: Ohio EPA  
Section #: 3.2 Pg.#: 9 Line #: 1<sup>st</sup> line after bullet Commentor: OFFO  
Code: c  
Original Specific Comment #: 1

Comment: The text states, "Water sampling will continue at depth increments of 10 feet until the lower limit of any discovered ...plume... or a depth of 20 feet below the water table has been reached." How will the depth and extent of the uranium plume be established considering the turn around time for the uranium analysis?

Response: In Revision 0 of the PSP, a conservative depth of 60 feet was selected based on previous work in the area, in order to minimize the probability of not establishing the depth of the base of any detected uranium plume. In response to Original Specific Comment #7, the depth was changed to 20 feet below the water table. If the uranium concentration of the

20-foot sample is at or above 30 µg/L, a new hole will need to be probed in the same area to collect deeper samples. Additional holes will also need to be probed to establish the extent of any plume.

Action: As stated in the response.

2. Commenting Organization: Ohio EPA Commentor: OFFO  
 Section #: 3.4 Pg #: 11 Line #: 4<sup>th</sup> Code: C  
 Original Specific Comment #: 2

Comment: The text states, "Plugging the hole with bentonite slurry will begin 3 feet above the sand and continue to the ground surface. We infer that the sand referred to here is the sand used to fill the borehole at the water table and does not refer to the GMA material. It is not clear why there is a three-foot interval of the borehole between the top of the sand and the bottom of the injected rout. Why isn't the grout injected continuously from the sand up to the surface?"

Response: Grout will be injected continuously from the sand (used to fill the borehole) up to the ground surface.

Action: As stated in the response.

3. Commenting Organization: Ohio EPA Commentor: OFFO  
 Section #: 3.4 Pg #: 11 Line #: last line of first continuous paragraph Code: c  
 Original Specific Comment #: 3

Comment: The text states, "Plugging work will be scheduled so that no boreholes will be left open over a weekend." This is not acceptable. No boreholes should be allowed to remain open over night.

Response: Per discussion during the weekly teleconference on July 6, 2004, boreholes can remain open overnight if needed, but efforts will be made not to leave boreholes open overnight whenever possible.

Action: As stated in the response.

4. Commenting Organization: Ohio EPA Commentor: OFFO  
 Section #: 7.2 Pg #: 15 Line #: last line on page Code: c  
 Original Specific Comment #: 4

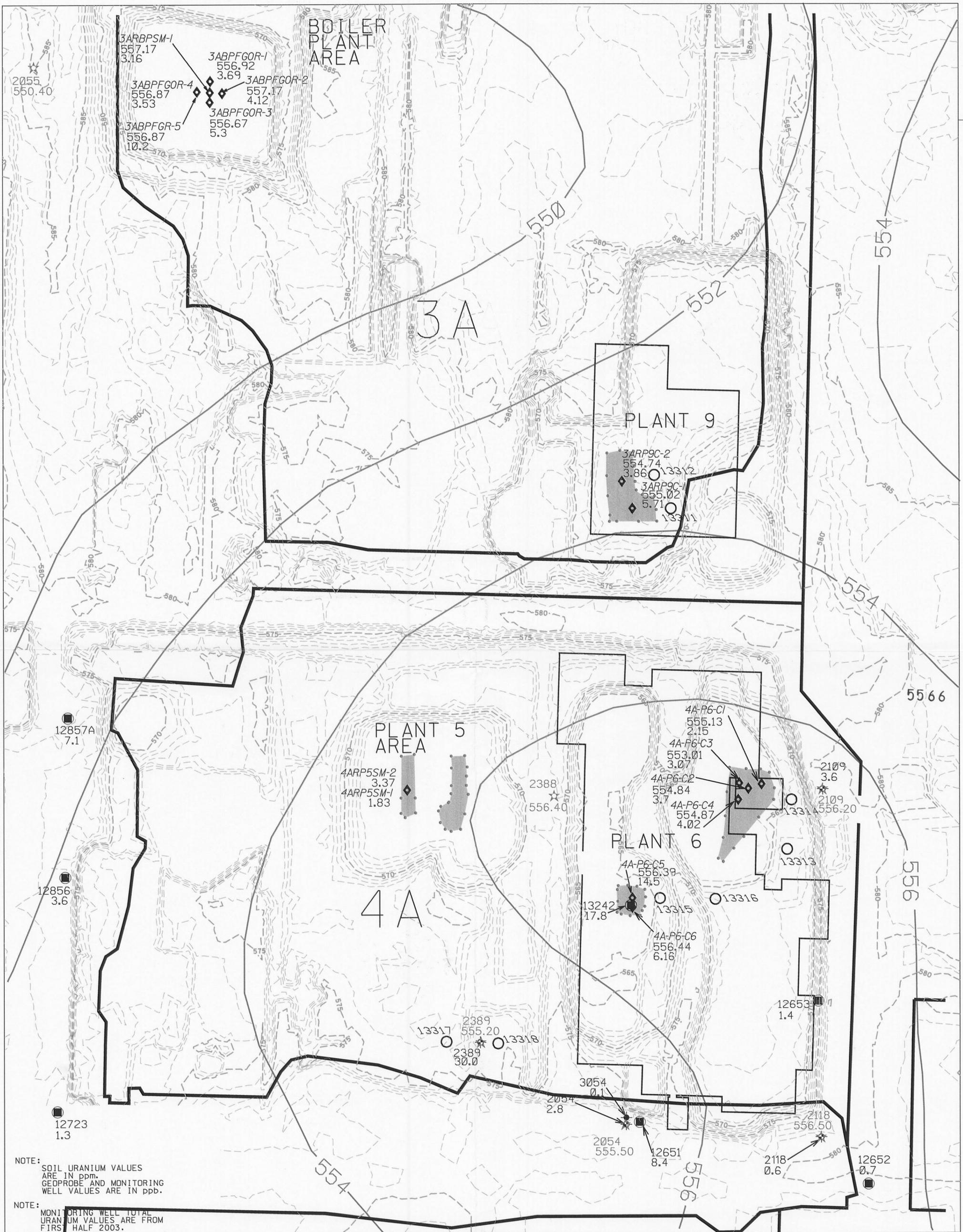
Comment: The text states, "However, a location movement of less than 25 feet will not require a variance." This is acceptable, but no boring should be moved to a location where water will pond.

Response: Agreed. No borehole will be moved to a location where water will pond. Preliminary Conceptual Restoration Plans also indicate direct-push locations are not located in any spillways or channels that will remain after restoration.

Action: As stated in the response.

STATE PLANNING COORDINATE SYSTEM 1983

29-JUN-2004



NOTE: SOIL URANIUM VALUES ARE IN ppm. GEOPROBE AND MONITORING WELL VALUES ARE IN ppb.

NOTE: MONITORING WELL TOTAL URANIUM VALUES ARE FROM FIRS HALF 2003.

LEGEND:		MONITORING WELL URANIUM VALUE		BASE OF GLACIAL OVERBURDEN CONTOUR (FROM RI PLATE 3-2)		PLUGGED AREAS	
12651	8.4	2118	0.6	—	—	■	SCALE
4A-P6-C6	556.13	13312	0	- - -	- - -	■	80 40 0 80 FEET
556.13	6.16	2389	555.20	- - -	- - -	■	
				- - -	- - -	■	
				- - -	- - -	■	

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FIGURE 1. PROPOSED DIRECT-PUSH GROUNDWATER SAMPLING LOCATIONS IN GMA BENEATH EXCAVATION AREAS 3A AND 4A

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