



Department of Energy

**Ohio Field Office
Fernald Area Office**
P. O. Box 538705
Cincinnati, Ohio 45253-8705
(513) 648-3155



4066

09 JAN 2002

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

DOE-0215-02

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

Dear Mr. Saric and Mr. Schneider:

**TRANSMITTAL OF THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY AND
OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENTS ON THE DRAFT PROJECT
SPECIFIC PLAN FOR PREDESIGN SAMPLING IN THE SOLID WASTE LANDFILL AND FIRE
TRAINING FACILITY**

- References:
- 1) Letter, T. Schneider to J. Reising, "PSP for Pre-design Sampling in the SWL and the FTF," dated November 21, 2001
 - 2) Letter, J. Saric to J. Reising, "Solid Waste Landfill and Fire Training Facility PSP," dated November 28, 2001

Enclosed for your approval are responses to the United States Environmental Protection Agency and Ohio Environmental Protection Agency comments on the draft Project Specific Plan for Pre-design Sampling in the Solid Waste Landfill and Fire Training Facility.

09 JAN 2002

Mr. James A. Saric
Mr. Tom Schneider

-2-

DOE-0215-02

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

Enclosures: As Stated

cc w/enclosures:

R. Greenberg, EM-31/CLOV

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

F. Hodge, Tetra Tech

AR Coordinator, Fluor Fernald, Inc./MS78

cc w/o enclosures:

M. Jewett, Fluor Fernald, Inc./MS52-2

J. D. Chiou, Fluor Fernald, Inc./MS52-0

ECDC, Fluor Fernald, Inc./MS52-7

**RESPONSES TO U.S. ENVIRONMENTAL PROTECTION AGENCY
TECHNICAL REVIEW COMMENTS ON THE
DRAFT PROJECT SPECIFIC PLAN FOR PREDESIGN SAMPLING IN THE
SOLID WASTE LANDFILL AND THE FIRE TRAINING FACILITY
(20600-PSP-0002, REVISION A)**

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

SPECIFIC COMMENTS

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 2.4.2

Page #: 2-3

Line #: 12

Original Specific Comment #: 1

Comment: The text states that five samples collected from location A6-SWL-14 will be analyzed for thorium-230 using both a newly developed method and the standard method to assess the comparability of the methods. However, Figure 2-3 and Table C-1 indicate that the comparability study will be conducted using samples collected from location A6-SWL-20. The text, Figure 2-3 and Table C-1 should be revised to make them consistent in this regard.

Response: Agreed.

Action: Revise Section 2.4.2 to indicate five samples will be collected from location A6-SWL-20.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 3.3.2

Page #: 3-3

Line #: 22

Original Specific Comment #: 2

Comment: The text states that for two locations, radium and thorium will be included in the analyte list because non-total uranium and thorium contamination is deeper than total uranium and thorium contamination. However, the text identifies only one such location, Zone 3-435. In addition, Table C-1 is not clear as to which samples will be analyzed for radium and thorium. The text and Table C-1 should be revised to clearly identify the locations whose samples will be analyzed for radium and thorium.

Response: First, the second location at which total uranium/thorium contamination was deeper than non-total uranium/thorium is 044703-09. Second, we believe that in the above comment, U.S. EPA was referring to Table C-2 and not C-1. In Table C-2, there was an error in the Target Analyte List (TAL) column. Everywhere there is an "A", there should actually be a "B". TAL B includes radium and thorium in the analyses. It is agreed that the text should be revised for clarification of sample locations sampled for radium and thorium.

Action: Sample location ID 044703-09 will be added to the text. Table C-2 will be revised to change all references to TAL A to TAL B. The text will also be revised to include sample locations A6-FTF-21, 22, 29 – 33 as those locations that will include radium and thorium in their analyses.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 3.5

Page #: 3-5

Line #: NA

Original Specific Comment #: 3

Comment: The text in Section 2.5 on Page 2-4 includes a provision for the Characterization Manager to identify additional boring and sampling locations if they are deemed necessary to adequately define the boundaries of the areas of contamination in the Solid Waste Landfill. A similar provision should be added to Section 3.5 in order to ensure that the boundaries of the contaminated areas in the Fire Training Facility can also be fully defined.

Response: Agreed.

Action: Text will be added to Section 3.5 to add a similar provision for the Fire Training Facility.

during historical sampling, all of which are not ASCOCs for Area 6. Of the remaining OSDF WAC organic constituents, only two were detected and those were well below OSDF WAC, carbazole at 89 milligrams per kilogram (mg/kg) (OSDF WAC = 72,700 mg/kg) and PCE at 30 micrograms per kilogram ($\mu\text{g}/\text{kg}$) (OSDF WAC = 128 mg/kg). Although there are no WAC issues related to organic constituents, during excavation control, organic analyses will be implemented via photoionization detector (PID) and/or portable gas chromatograph.

Action: None.

Commenting Organization: Ohio EPA
Section #: 2.4.2 Pg. #: 2-3 Line #: 2-3 Commentator: OFFO
Code: C
Original Comment #: 4

Comment: This section states that "above-FRL contamination has been found at the 22-foot interval in the *middle section* of the SWL", while Section 2.1, Line 16 states "waste material at depths up to 20 feet deep in the *southeastern corner*".

Response: The statement in Section 2.4.2 that refers to the middle section of the SWL relates to boring 1035, located in the north-central portion of the SWL, which actually has a result of 54.3 parts per million (ppm) uranium at 22 feet. This is above the as low as reasonably achievable (ALARA) goal of 50 ppm uranium and not truly above FRL. The text in Section 2.1 pertains to points in the southeastern section of the SWL and refers to lithological descriptions of waste or anomalous material being encountered at 20 feet.

Action: The text of Section 2.4.2 will be revised to state that there is elevated uranium in boring 1035 at the 22-foot interval above the ALARA goal of 50 ppm, but not above FRL.

Commenting Organization: Ohio EPA
Section #: 3.2 Pg. #: 3-3 Line #: 24 Commentator: OFFO
Code: C
Original Comment #: 5

Comment: Beginning in this section, references to different "Zone 3" locations, such as "Zone 3-456" and "Zone 3-435" are made, but these locations are not marked on any maps in this package. Please clarify.

Response: Concur.

Action: The map(s) will be modified to include "Zone 3-" in front of the appropriate sample locations.

Commenting Organization: Ohio EPA
Section #: 3.3.2 Pg. #: 3-3 Line #: 8-11 Commentator: OFFO
Code: C
Original Comment #: 6

Comment: As noted in Ohio EPA's comments on the "PSP for Sampling of Miscellaneous Areas for On-Site Disposal Facility WAC", all samples in this area need to be analyzed for Tc-99.

Response: Concur

Action: All sample locations will include analysis for technetium-99 at all intervals. An additional Target Analyte List (TAL) will be added (TAL "Q"), and Table C-2 will be revised to reflect this change.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 3.4

Pg. #: 3-4

Line #: 1-8

Code: C

Original Comment #: 7

Comment: This section states that there is known contamination in the former open-top tank area as well as where the former skid tank and pond were located. There are no samples for predesign being taken in this area of the open-top tank, and very few in the skid tank and pond area. Samples should be added to these areas.

Response: The sampling strategy was designed to bound the area of contamination for excavation purposes. It is intended that the area of the open-top tank and skid tank pond will be excavated prior to certification. However, sample locations could be added in these two areas to provide additional information for bounding the depth of the anticipated excavation in those immediate areas.

Action: Two sample locations will be added in the area of the open top tank and sampled to a depth of 6 feet. Another sample location will be added in the center of the pond area and sampled to a depth of 9 feet.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 3.5.2/Figure 3-2

Pg. #: 3-5

Line #: 17-19

Code: C

Original Comment #: 8

Comment: Ohio EPA believes that four samples in the northern portion of the east field in the FTF are not sufficient, since there is no historical data from this area to delineate the area in regards to FRL attainment. In reviewing Figure 3-2, it appears to have possible data gaps. Please clarify.

Response: Concur.

Action: Additional sample points will be added to this area. Four sample locations will be added in line west to east with sample point 4, three to the west and one to the east. Two locations will be added to the north, one between locations 1 and 2, and one between locations 2 and 3. This will increase the number of samples in the northern portion of the east field from four to ten.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 5.1

Pg. #: 5-3

Line #: 4-8

Code: C

Original Comment #: 9

- Comment:**
- a) Will 60 degrees Fahrenheit be sufficient to produce VOC off-gassing for head-space analysis in regards to the VOC/COCs?
 - b) Is the PID measurement of 10 ppm a reasonable ionization concentration for targeting the VOCs/COC?

Response: a) The head-space analysis was approved in the Project Specific Plan (PSP) for Area 3A/4A Subsurface Predesign Investigation and was carried over into this PSP. Based on experience, the head-space analysis provided little added benefit and proved to be redundant to that of the initial PID screen. Therefore, as a conservative approach, the head space will be removed as a requirement and any result above the 5 ppm on the PID scan of the core will trigger a biased sample to be collected.

- b) With the removal of the head-space requirement, a PID measurement of 5 ppm will be the new trigger level for biased samples. This is a reasonable level because it is a distinguishable concentration above background, whereby indicating elevated organic material, yet near the detection limit of the PID.

Action: The head-space analysis will be removed as a requirement for this PSP. The trigger for collecting a biased sample for VOCs will become 5 ppm above background on the PID scan of the boring core. The new text will read:

“The entire length of each boring will also be screened using a photoionization detector (PID). For Geoprobe cores, the core liners will be opened for PID screening. Any sample interval with a sustained 5 ppm above-background reading on the PID will result in that interval being submitted for VOC analysis (Appendix B, TAL Q) and documented on a V/FCN.”

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 6.4

Pg. #: 6-2

Line #: 37-40

Code: C

Original Comment #: 10

Comment: This section discusses how changes will be implemented via V/FCN. In previous PSPs, the QA section has used language that refers to the fact that the V/FCN must be approved by Ohio EPA before implementing changes. Changes are defined as “significant” and “non-significant” and the definitions are made clear in the Proposed SDFP Sampling PSP Planning Guidelines.

Response: Concur.

Action: The appropriate procedure for variances will be included in the text in Section 6.4, Implementation of Field Changes.

8
—