



Department of Energy

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JUN 15 1999

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-0845-99

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 THE U.S. ENVIRONMENTAL PROTECTION AGENCY
AND OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENTS, ON THE FINAL AREA
2, PHASE III CERTIFICATION DESIGN LETTER, AND REVISED PROJECT SPECIFIC PLAN
FOR AREA 2, PHASE III CERTIFICATION SAMPLING**

- References:
- 1) Letter, J. Saric to J. Reising, "A2Pill CDL and Certification Sampling," dated May 11, 1999
 - 2) Letter, T. Schneider to J. Reising, "DOE- FEMP Comments: A2Pill CDL," dated May 25, 1999
 - 3) Letter, T. Schneider to J. Reising, "DOE- FEMP Comments: A2Pill PSP," dated May 25, 1999

Enclosed for your approval are responses to the U.S. Environmental Protection Agency (U.S. EPA) and Ohio Environmental Protection Agency (OEPA) comments on the draft Certification Design Letter (CDL) for Area 2, Phase III (A2Pill) and responses to the OEPA comments on the draft Project Specific Plan (PSP) for A2Pill Certification Sampling. Also enclosed are the final CDL and revised PSP with comment responses incorporated. Please note that all references to the radium "hot spot" were removed from the enclosed A2Pill Part 1 CDL and PSP. As documented in the comment responses, certification of the radium "hot spot" area will be submitted as a separate CDL (A2Pill Part 2) at a later date.

Mr. James A. Saric
Mr. Tom Schneider

-2-

JUN 15 1999

Please contact Robert Janke at (513) 648-3124 if there are any questions regarding this transmittal.

Sincerely,



Johnny W. Reising
Fernald Remedial Action
Project Manager

FEMP:Nickel

Enclosures

cc w/enclosures:

G. Jablonowski, USEPA-V, SRF-5J
R. Beaumier, TPSS/DERR, OEPA-Columbus
T. Schneider, OEPA-Dayton (three copies of enclosures)
F. Bell, ATSDR
M. Schupe, HSI GeoTrans
R. Vandegrift, ODH
F. Barker, Tetra Tech
AR Coordinator, FDF/78

cc w/o enclosures:

N. Hallein, EM-42/CLOV
R. Janke, OH/FEMP
K. Nickel, OH/FEMP
A. Tanner, OH/FEMP
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T. Hagen, FDF/65-2
J. Harmon, FDF/90
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M. Rolfes, FDF/60
T. Walsh, FDF/65-2
ECDC, FDF/52-7

000002

**RESPONSES TO U.S. EPA TECHNICAL REVIEW COMMENTS ON THE
DRAFT CERTIFICATION DESIGN LETTER FOR AREA 2, PHASE III
(20460-RP-0001, REVISION B)**

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

SPECIFIC COMMENTS

Commenting Organization: U.S. EPA Commentor: Saric
Figure #: 2-3 Page #: NA (Not Applicable) Line #: NA

Original Specific Comment #: 1

Comment: Figure 2-3 and similar figures in Appendixes A, B, C, and D show real-time analytical results in four different colors. However, the legend of each figure identifies the activities associated with each color using three hollow circles and one dot. The lines used to delineate the hollow circles are very narrow so the colors are difficult to identify. To enhance readability, the legend should be modified to use either solid dots or much thicker lines to identify the lower activity levels.

Also, it would be useful if the radium hot spot area within Area 2, Phase III, can be shown by either indicating its location on Figure 2-2 or by adding an orientation reference map as an inset to Figure 2-3.

Response: Concur with modification of the legend. Comment noted in regards to referencing the radium hot spot area on Figure 2-2, however, in response to Ohio EPA, all references to the radium hot spot area will be removed from this CDL and PSP (including Figure 2-3) and addressed in separate excavation plan, CDL and PSP.

Action: The legend will be modified. Area 2, Phase III will be separated into a Part One and Part Two. The Part Two area will include the radium hot spot area and will be submitted as a separate CDL after delineation and excavation of the contamination. Part One is the remainder of A2PIII area that is to be retained in this CDL.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 4.2 Page #: 4-4 Line #: 6 and 7

Original Specific Comment #: 2

Comment: The text states that the second criterion for passing a certification unit is related to the hot spot criterion currently being formulated by the U.S. Environmental Protection Agency, Ohio Environmental Protection Agency, and U.S. Department of Energy. The meaning of this statement is unclear because the hot spot criterion is presented in the approved final "Sitewide Excavation Plan" dated July 1998. The text should be revised to address this issue.

Response: Concur.

Action: Text in Section 4.2 will be revised stating the second criterion based on individual samples and citing Figure 3-11 of the Sitewide Excavation Plan.

000003

**RESPONSES TO THE OEPA COMMENTS ON THE
DRAFT CERTIFICATION DESIGN LETTER FOR AREA 2, PHASE III
(20460-RP-0001, REVISION B)**

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

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

Comment: The northern area of A2PIII which has been found to contain Radium-226 contamination is not a *hot spot*, and will need to be addressed entirely separate from this CDL, not as the proposed addendum. All references to this area need to be removed from this document.

Response: Concur.

Action: The A2PIII certification will be separated into Part One and Part Two. The Part Two area will include the radium hot spot area and will be submitted as a separate CDL after excavation of the contamination. These changes will be reflected in the revised CDL for Part One.

Commenting Organization: Ohio EPA
Section #: 1.2 Pg. #: 1-2 Line #: 23-26 Commentor: OFFO
Original Comment #: 2 Code: C

Comment: It is unclear why stockpile MTL-HRD-011, near the Southern Waste Units equipment wash facility, is included in the scope of this project. It seems more appropriate to have included it in the Southern Waste Units excavation project or as its own CDL and PSP. Please clarify.

Response: Comment noted; however, additional data at depth prior to any disposition is necessary to characterize the soil within and beneath the pile. Certification of the Southern Waste Units (SWUs) will not be initiated until fiscal year 2001. Including this stockpile in the A2PIII Part One CDL allows for timely data acquisition to supplement the predesign investigation in Area 2, Phase II and, if necessary, for potential excavation by the SWUs subcontractor in fiscal year 2000.

Action: None required.

Commenting Organization: Ohio EPA
Section #: 2.0 Pg. #: 2-1 Line #: 13-14 Commentor: OFFO
Original Comment #: 3 Code: C

Comment: How will the semi-permanent obstructions, such as excess piping, be checked to ensure they are not contaminated before removal?

Response: All work will comply with sitewide radiological controls which requires radiation technician coverage with any soil disturbance even in areas expected to be free of contamination. In regard to the excess piping, the water pumped through the test piping had concentrations significantly less than the soil final remediation levels for the area and, therefore, no contamination is expected.

Action: None required.

000004

2316

Commenting Organization: Ohio EPA
Section #: 4.1.1/Appendix F Pg. #: 4-1
Original Comment #: 4

Line #:

Commentor: OFFO
Code: C

Comment: The text clearly explains the selection of certification sampling locations, which conveys sound criteria. However in reviewing the diagrams, in Appendix F, large spaces or gaps between locations are apparent in the overall design of the certification sampling of each stockpile. In addition, stockpiles do not appear sufficiently bounded. Ohio EPA suggests additional sampling locations to ensure complete certification of each stockpile.

Response: The volume of soil certified in a standard Group 2 CU is 4630 cubic yards (cy) (i.e., 500 x 500 x 0.5 feet). The volume of soil in MTL-SPO-019, MTL-SPO-004, and MTL-SPO-005 are approximately 1000 cy, 2500 cy, and 2800 cy respectively. The soil in these three piles is stripped topsoil from the South Field Extraction System Project in areas of A2PIII where contamination is not expected. Since these stockpile volumes are significantly less than the standard Group 2 CU volumes, DOE proposes that the number of sampling locations are adequate for these three stockpiles and, if necessary, all proposed archive samples can be submitted for analysis. Since the stockpile volume for MTL-HRD-011 (5100 cy) is slightly greater than the standard Group 2 CU soil volume, DOE proposes to collect two more samples.

In regards to the gaps and sufficient bounding, DOE used the random certification sampling protocol to establish sample locations. Since the stockpile soils are expected to be homogenous and non-impacted, the proposed sampling locations should be representative of the area. Statistical analysis of the sampling results will verify this assumption.

Action: Add two more sample locations within MTL-HRD-011 CUs (A2P3-4S and -4SF).

Commenting Organization: Ohio EPA
Section #: 5.0 Pg. #: 5-1
Original Comment #: 5

Line #: 15

Commentor: OFFO
Code: C

Comment: In the Executive Summary, page ES-2, it is stated that the Certification Report will be issued December 17, 1999. In this section, the Certification Report has a target date of January 28, 2000. Please clarify.

Response: The two dates should be the same (December 17, 1999). The error will be corrected in the revised Part One CDL.

Action: The date will be corrected to December 17, 1999.

000005

RESPONSES TO THE OEPA COMMENTS ON THE
DRAFT PROJECT SPECIFIC PLAN FOR
AREA 2, PHASE III CERTIFICATION SAMPLING
(20460-PSP-0002, REVISION A)

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

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

Comment: The northern area of A2PIII which has been found to contain Radium-226 contamination is not a *hot spot*, and will need to be addressed entirely separate from this PSP, not as the proposed addendum. All references to this area need to be removed from this document.

Response: Concur.

Action: The A2PIII PSP will be separated into Part One and Part Two. The Part Two area will include the radium hot spot area and will be submitted as a separate PSP after excavation of the contamination. These changes will be reflected in the revised PSP for Part One.

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

Comment: Please provide numbers for each line of text in future documents.

Response: DOE concurs with providing line numbering on draft documents. Line numbering will be removed when the document is considered pre-approved or approved (Revision 0).

Action: Line numbering will not be included in the revised PSP since the document is no longer considered a draft and is expected to be approved.

Commenting Organization: Ohio EPA
Section #: 2.1.1 Pg. #: 2-2 Line #: Commentor: OFFO
Code: C
Original Comment #: 3

Comment: The partial paragraph at the top of page 2-2 discusses the target analyte list, but does not include the parameters in the text. Please provide this information or reference Table 3-1.

Response: Concur.

Action: A reference to the Sampling Analytical Requirements (Table 3-1) will be added to the text of Section 2.1.1.

Commenting Organization: Ohio EPA
 Section #: 2.1.2 Pg. #: 2-2 Line #: first paragraph
 Original Comment #: 4

Commentor: OFFO
 Code: C

Comment: As previously mentioned in Ohio EPA's comments on DOE's A2PIII CDL, the selection of certification sampling locations and the method used is appropriate. However, through review, there appears to be large spaces or gaps between the sampling points which is apparent in the overall design of the certification sampling locations in each stockpile. In addition, stockpiles do not appear sufficiently bounded. Ohio EPA suggests additional sampling locations to ensure complete certification of each stockpile.

Response: See response to Ohio EPA Comment #4 to the A2PIII CDL (20460-RP-0001, Rev B).
 Action: Add two more sample locations within MTL-HRD-011 CUs (A2P3-4S and -4SF).

Commenting Organization: Ohio EPA
 Section #: 2.3 Pg. #: 2-2 Line #:
 Original Comment #: 5

Commentor: OFFO
 Code: C

Comment: What type of equipment will be used to collect samples? Please specify.

Response: The surface soil sampling locations in areas covered by grass will be sampled using a 3-inch diameter plastic or stainless steel liner. The liner is manually driven 6 inches into the ground using a slide hammer and adaptor attached to the top of the liner.

For surface soil sample locations in gravel areas, either a Geoprobe[®] core sampler (Macro-core tool) or hand auger will be used to penetrate the gravel to reach the original surface soil. For the soil stockpiles accessible with a vehicle, Geoprobe[®] core sampling equipment will be used. Otherwise, a hand auger or other manual core sampling equipment will be utilized.

Action: The text will be modified to describe the types of equipment which will be used.

Commenting Organization: Ohio EPA
 Section #: 2.3 Pg. #: 2-3 Line #: first partial paragraph
 Original Comment #: 6

Commentor: OFFO
 Code: C

Comment: The text refers to duplicate samples being the same as split samples. In the true definition of *duplicate* and *split*, they are both different types of samples. Please clarify.

Response: The reference to split samples will be removed from the text in order to clarify that we are referring only to duplicate samples.

Action: The text will be modified appropriately.

000007

Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.3 & Appendix B Pg. #: 2-3 Line #: first full paragraph Code: E
Original Comment #: 7

Comment: In the first full paragraph, it discusses the footprint CU samples and explains that they "will be collected at the planned depth identified in Appendix B." The referenced Appendix should be D. Please correct.

Response: Concur.

Action: The text will be corrected appropriately.

Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.3 Pg. #: 2-3 Line #: second full paragraph Code: C
Original Comment #: 8

Comment: The text states that up to one foot in radius is the distance to be used for moving a sampling location when encountering surface or subsurface obstacles. However in Section 4.1 of the A2PIII CDL on page 4-1 and in Section 2.2 of the PSP on page 2-2, the minimum distance is stated as three feet. Please correct.

Response: Concur. Implementing a smaller radius may help minimize potential failure of the minimum distance criteria.

Action: The CDL text in Section 4.1 will be modified to reflect the one foot radius movement.

Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.3 Pg. #: 2-3 Line #: last sentence Code: C
Original Comment #: 9

Comment: What is meant by the term *analytical release*? Please explain.

Response: An analytical release is an internal FDF term which refers to grouping field data, analytical results, and validation information. A sequential number is assigned to the information which allows for easier data management.

Action: None required.

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