



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

1225

L-0663
JAN 22 09 AM '98
6446.6

JAN 22 1998

REPLY TO THE ATTENTION OF:

SRF-5J

Mr. Johnny W. Reising
United States Department of Energy
Feed Materials Production Center
P.O. Box 398705
Cincinnati, Ohio 45239-8705

RE: A1,P2 IRDP

Dear Mr. Reising:

The United States Environmental Protection Agency (U.S. EPA) has completed its review of the United States Department of Energy's (U.S. DOE) draft Integrated Remedial Design (IRDP) package for Area 1, Phase II (A1,P2).

The IRDP provides the overall plan for remediating the central and southern parts of Area 1.

U.S. EPA has identified several issues with this submittal, specifically the discussions of technetium-99, the sludge drying beds, and the use of real-time instruments. U.S. EPA has attached its comments.

Therefore, U.S. EPA disapproves the A1,P2 IRDP pending incorporation of adequate responses to comments into a revised document. U.S. DOE must submit responses to comments and a revised document with thirty (30) days receipt of this letter.

Please contact me at (312) 886-0992 if you have any questions regarding this matter.

Sincerely,

James A. Saric
Remedial Project Manager
Federal Facilities Section
SFD Remedial Response Branch #2

Enclosure

cc: Tom Schneider, OEPA-SWDO
Bill Murphie, U.S. DOE-HDQ
John Bradburne, FERMCO
Terry Hagen, FERMCO
Tom Walsh, FERMCO

1

text should be revised to provide a more detailed explanation of why technetium-99 is no longer a concern in Area 1, Phase II.

Commenting Organization: U.S. EPA Commentor: Saric
 Section #: 3.1.4 Page #: 3-11 Line #: 24
 Original Specific Comment #: 3
 Comment: The text states that arsenic is an impurity in the lead at the Trap Range. However, arsenic is commonly used as an alloying agent in lead to control its hardness. The text should be revised to reflect this fact.

Commenting Organization: U.S. EPA Commentor: Saric
 Section #: 3.3.7 Page #: 3-39 Line #: 16
 Original Specific Comment #: 4
 Comment: The text states that closure of the Sludge Drying Beds will be demonstrated when the average concentration of tetrachloroethene in four samples collected from within the footprint of the Sludge Drying Beds is less than the final remediation level (FRL). This approach is not acceptable because it does not allow for variations in the tetrachloroethene concentration of the remaining sludge (or other residue) or for any analytical error. The criterion for demonstration of closure should be the same upper confidence limit on the mean as will be used to determine whether the levels of other contaminants are below their respective FRLs.

Commenting Organization: U.S. EPA Commentor: Saric
 Section #: 6.6.2 Page #: 6-16 Line #: 7
 Original Specific Comment #: 5
 Comment: This section discusses events that would require departures from the implementation plan. In view of recent discoveries in the nearby South Field, DOE should consider including the discovery of uranium metal in Area 1, Phase II as a possible event and providing an explicit contingency plan for this event in Table 6-2.

Commenting Organization: U.S. EPA Commentor: Saric
 Appendix A: Section 2.3.9 Page #: 2-17 Line #: NA
 Original Specific Comment #: 6
 Comment: The text in this section of Appendix A states that "controls will be included to shut off inflow of water from the contractors dewatering pump(s) and to shut off the water handling system pumps when flow drops to zero gpm." It is not clear how this will be accomplished using the equipment listed in this section. According to the text, the contractor's dewatering pumps will be trash-type, engine-driven pumps. The instrumentation drawings do not indicate how these pumps will be controlled (shut down) when the valves to the receiving tanks are closed. Because all other

The text in Appendix B-4 should be revised to reflect this fact.

Commenting Organization: U.S. EPA
 Appendix B-4: Appendix A Page #: 1 to 4
 Original Specific Comment #: 11

Commentor: Saric
 Line #: NA

Comment: The table in Appendix A of Appendix B-4 includes laboratory qualifiers such as "B," "N," "W," and "*" for many samples. Either the data should be validated and the qualifiers converted to "J" and "U," as appropriate, or the qualifiers and their implications regarding the usability of the data should be explained.

Commenting Organization: U.S. EPA
 Appendix B-6: Section 1.3 Page #: 1-2
 Original Specific Comment #: 12

Commentor: Saric
 Line #: 5 and 6

Comment: The text states that Figure 1-1 shows the sampling locations. However, this figure is missing from the review copy of the implementation plan so no conclusions can be drawn regarding the completeness of the sampling. Figure 1-1 should be included for evaluation in the revised plan.

Commenting Organization: U.S. EPA
 Appendix B-6: Sections 4 and 5 Page #: NA
 Original Specific Comment #: 13

Commentor: Saric
 Line #: NA

Comment: Sections 4 and 5 of this appendix are missing from the review copy of the implementation plan. These sections should be submitted for review in the revised plan.

Commenting Organization: U.S. EPA
 Appendix B-6: Section 7.2 Page #: 7-1
 Original Specific Comment #: 14

Commentor: Saric
 Line #: 30

Comment: The text states that acetone was "detected below its detection limit" in a sample. The text should be revised to read "below its quantitation limit," or a similar phrase. Also, acetone is a common laboratory contaminant that is often detected at the listed concentration, so its presence may be a laboratory artifact. The text should be revised to address this possibility.

Commenting Organization: U.S. EPA
 Appendix B-7 Page #: NA
 Original Specific Comment #: 15

Commentor: Saric
 Line #: NA

Comment: The appendix provides the rationale for sample collection and the tabulated results of the sample analyses. However, DOE provides no discussion of the results. At a minimum, DOE should discuss (1) whether any sample results exceed FRLs or relevant risk-based criteria and (2) how the results modify earlier conclusions regarding the nature and extent of the contamination. The appendix should be revised accordingly.

Commenting Organization: U.S. EPA
 Appendix F: Figure F-2 Page #: NA
 Original Specific Comment #: 25
 Comment: The figure shows the correlation between HPGe and analytical laboratory results. The figure should be revised to include confidence bands like those in Figures F-1 and F-3.

"TECHNICAL SPECIFICATIONS FOR REMEDIATION AREA 1, PHASE II SITE PREPARATION AND REMEDIATION PACKAGE"

Commenting Organization: U.S. EPA
 Section #: 02205
 Original Specific Comment #: 26
 Comment: Various portions of the implementation plan (Section 1.2.1.6 on Page 1-8, Section 3.2.2 on Page 3-16, and Section 3.3.3.1 on Page 3-28) mention the removal of old agricultural drainage tiles and their placement in the On-Site Disposal Facility (OSDF). The removal of the tiles and their placement in the OSDF should be discussed in Section 02205 in conjunction with the underground utility lines. If relevant, the tiles should also be discussed in Section 03316.

Commenting Organization: U.S. EPA
 Section #: 02211-3.2.A.2
 Original Specific Comment #: 27
 Comment: The text states the minimum depths for in situ stabilization of lead-contaminated soil; however, no maximum depths are provided. The text should be revised to specify the maximum depths. Depth controls are needed to avoid use of dilution in the stabilization process as a means of reducing lead concentrations below characteristically hazardous levels.

Commenting Organization: U.S. EPA
 Section #: 02270-3.1.B
 Original Specific Comment #: 28
 Comment: The text discusses control of water that will accumulate in the STP excavations. The text should be revised to add that the water from the Sludge Drying Bed excavations will be managed as hazardous waste and therefore will be segregated from the other water.