RESPONSES TO U.S. EPA TECHNICAL REVIEW COMMENTS ON THE DRAFT (REVISION C, NOVEMBER 1997) INTEGRATED REMEDIAL DESIGN PACKAGE FOR AREA 1, PHASE II

GENERAL COMMENTS

IMPLEMENTATION PLAN FOR AREA 1 PHASE II SOIL CHARACTERIZATION AND EXCAVATION PROJECT (20710-PL-0002, Revision C, November 1997)

Commenting Organization: U.S. EPA Commentor: Saric
Section #: Not Applicable (NA) Page #: NA Line #: NA
Original General Comment #: 1

Comment: The implementation plan indicates that the preliminary findings of the predesign studies show that technetium-99 is no longer a contaminant of concern in Area 1, Phase II. However, the plan provides only limited justification of the conclusion that technetium-99 is no longer a concern. Specifically, the plan should explain why earlier indications of the presence of technetium-99 are now considered to be invalid or irrelevant in the Sewage Treatment Plant (STP) area. Appendix B-5 begins to provide such an explanation, but the text is insufficient to justify the conclusion. This issue is especially important because neither the proposed field testing for health and safety or precertification purposes, nor the proposed testing for certification (as discussed in Appendix F) can detect technetium-99. After the final data are analyzed, the plan should be revised to include a complete discussion of the presence or absence of technetium-99 in the STP area (see Original Specific Comment No. 2).

Response: When the Implementation Plan was first drafted, not all the (Phase 1) data had been received from the lab. Preliminary (unvalidated) results from some sample analyses indicated that technetium-99 was not present, but this determination could not be certain without all the final sample data. To facilitate development of the remedial design (excavation depth, ASCOC selection, etc.), the assumption was made that technetium-99 was not present. In the text and Appendix B, this temporary data gap was acknowledged. Justification that technetium-99 would not be detected was provided in Section 2.2.3, as well as in Appendix B.

The final Phase 1 data seemed to support the conclusions in all areas except the area near the STP Incinerator. A variance to the Pre-Design Investigation PSP for Investigation of Technetium-99 in the Sewage Treatment Plant was completed to provide for additional (Phase 2) sampling to investigate the unexpected technetium-99 detections. This variance was submitted to the U.S. EPA on March 10, 1998. Resulting data from the Phase 2 sampling indicated technetium-99 contamination to be more prevalent than expected. The data indicated generally surficial soil contamination surrounding some of the wastewater treatment units and in an area to the north. To bound the extent of this contamination, another PSP variance for Phase 3 sampling was prepared. The Phase 3 sampling results revealed that all areas except around the trickling filters had been sufficiently bounded by the Phase III sampling. As a result of the Phase 3 sampling, the extent of contamination surrounding the trickling filters was

refined. In conclusion, technetium-99 contamination in the STP area is limited to the top 6 inches of soil surrounding the trickling filters in an area west of the primary settling basins, and in two areas in the north portion of the STP.

Action: Pertinent portions of the Implementation Plan were updated to include the final results of the technetium-99 investigation in the STP area.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: NA Page #: NA Line #: NA
Original General Comment #: 2

Comment: [a] The remediation approach presented in the implementation plan involves using the real-time Radiation Tracking System (RTRAK) and high-purity germanium detector (HPGe) combined with physical sampling. However, the ability of the proposed real-time instruments to accurately measure contaminant levels has not been conclusively demonstrated. The text on Page ES-3 of the implementation plan states that the correlation between RTRAK, HPGe, and laboratory test results is excellent for uranium and thorium isotopes, but the plan does not provide an adequate quantitative summary of the correlation.

[b] In addition, the plan does not adequately address the limitations of the real-time instruments with regard to their use in Area 1, Phase II. This deficiency is particularly relevant to use of the real-time instruments in the STP area where excavations could extend to a depth of 20 feet below ground surface (bgs). The plan should be revised to address the following types of instrument limitations: (1) limited accessibility of the equipment to the base of a given excavation because of physical constraints; (2) interference from contamination on sidewalls, in perched water, or on debris; (3) heterogeneous distribution of contamination in samples; and (4) limitations of the equipment in defining lateral or vertical contamination on sidewalls or below the level that the equipment can penetrate within the base of a given excavation.

Response: [a] With respect to the correlation between RTRAK, HPGe and laboratory test results, there is no need for a detailed quantitative summary of the correlation. Those correlations have been discussed extensively in a series of comparability studies and subsequent addenda.

[b] Noted.

Action: [a] No action.

[b] The text will be revised to more explicitly address the limitations identified in the comment.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: NA Page #: NA Line #: NA
Original General Comment #: 3

Comment: The text of the implementation plan contains a number of reference citations that do not correspond to the references listed. For instance, Line 34 on Page 2-4 cites U.S. Department of Energy (DOE) (1995a) but should cite DOE (1995b), and

Section 1.1 on Page 1-1 of Appendix B-4 cites DOE (1993), which does not appear in any reference list in the plan. In addition, the text of the plan contains incorrect citations of figures and tables. On Page 2-16, Line 30 cites Figure 2-2 instead of correctly citing Figure 2-3. The text of the plan should be reviewed and revised as necessary to correct faulty citations of references, figures, and tables.

Response: Noted.

Action: References have been corrected in the revised Implementation Plan.

TECHNICAL SPECIFICATIONS FOR REMEDIATION AREA 1, PHASE II SITE PREPARATION AND REMEDIATION PACKAGE (20710-TS-0002, Rev. C, Nov. 1997)

Commenting Organization: U.S. EPA Commentor: Saric
Section #: NA Page #: NA Line #: NA
Original General Comment #: 4

Comment: The technical specifications indicate that as STP excavation progresses, DOE will excavate depressions that will be used as temporary water collection sumps. Water from the Sludge Drying Bed excavations should be managed as hazardous waste and therefore must be segregated from other water. The specifications should be revised to address this issue (see Original Specific Comment No. 28).

Response: The text of Section 3.4.4 of the Implementation Plan, regarding management of perched water and other remediation-generated water from the Sludge Drying Beds/STP excavation area, was the topic of a meeting with OEPA on March 20. In accordance with the consensus from that meeting, management of perched water (and other waters from this excavation area) will be determined by the Mixture Rule Exclusion [OAC 3745-51-03(a)(2)(e) and 40 CFR 261.3(a)(2)(iv)]. See the response and action to Ohio EPA Comment No. 73, which provides the text to be included in Section 3.4.4. Also see the response and action to U.S. EPA Specific Comment No. 28 regarding the corresponding technical specification section.

Action: See the actions for the referenced comments.

GEOTECHNICAL SAMPLING AND TESTING PLAN AREA 1, PHASE II SOUTHEAST BORROW AREA (20710-PL-0004, Rev. 0)

Commenting Organization: U.S. EPA Commentor: Saric
Section #: NA Page #: NA Line #: NA
Original General Comment #: 5

Comment: The geotechnical sampling and testing plan proposes drilling of eight soil borings to a depth of 15 feet bgs and testing of soil samples for moisture content; grain size; Atterberg limits; standard proctor; remolded consolidation; remolded, unconsolidated, undrained, triaxial compression; remolded, consolidated, undrained, triaxial compression; and remolded permeability. The proposed number of borings and

number and type of tests appear to be adequate for characterizing the borrow area soils that will be used to fill the areas excavated in A1PII. However, it is not clear how the variability of the brown tills will be evaluated or how unsuitable materials will be delineated. The text should be revised to clarify these issues.

Response: Geotechnical sampling is complete in the STP Backfill Borrow Area.

Action: Submit Geotechnical Report for A1PII Southeast Borrow Area.

SPECIFIC COMMENTS

IMPLEMENTATION PLAN FOR AREA 1 PHASE II SOIL CHARACTERIZATION AND EXCAVATION PROJECT (20710-PL-0002, Rev. C, Nov. 1997)

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 2.3.4.1 Page #: 2-18 Line #: 21 to 26
Original Specific Comment #: 1

Comment: The text indicates that no remedial activities are necessary with respect to or in the area of the Mid-Valley Crude Oil Pipeline. However, no information is provided to support this conclusion. For example, information should be provided regarding the age of the pipeline and the results of any integrity testing conducted on the pipeline. The text should be revised to address this issue.

Response: As indicated in the OU5 RI, the conceptual model for soil contamination in this part of the FEMP is airborne deposition. Post-RI sampling of the surface soils in this area was conducted during pre-design as part of the pre-design investigation survey of surface soils throughout A1PII. No areas requiring excavation of soil for remediation were detected in the area of the Mid-Valley Pipeline Company easement.

According to the local contact for the Mid-Valley Pipeline Company, the pipeline was constructed between 1949 and 1950 (before the facility currently known as the FEMP was constructed). The pipeline was likely constructed with bedding material either excavated from the trench or purchased from a supplier; backfill over the bedding material was originally excavated from the trench. As stated above, the pre-design investigation found no areas of surficial soil contamination in the vicinity of the pipeline easement.

As indicated in the Sitewide Excavation Plan, the SCEP will implement the at- and below-grade portion of the OU3 selected remedy. The remedy selected under the OU3 ROD governs the FEMP's former Production Area, production associated facilities and equipment, and support facilities. While the Mid-Valley crude oil pipeline is a facility under the National Contingency Plan (NCP), it is neither a FEMP production associated facility nor a FEMP support facility, and therefore is outside the scope of the OU3 ROD. Similarly, the pipeline is outside the scope all the operable unit definitions contained in the Amended Consent Agreement.

DOE is implementing its responsibilities under CERCLA, the National Contingency Plan, the Amended Consent Agreement, and the signed RODs for its FEMP facilities with due diligence. If the U.S. EPA has questions regarding the construction details, the integrity of, or the potential for releases (past, present or future) from the Mid-Valley Pipeline Company facility, DOE suggests that U.S. EPA make those known to the owner of that facility, whose local contact is:

Mid-Valley Pipeline Company
P.O. Box. 150
Burlington, Kentucky 41005
Attn.: Michael Deahl
(606) 371-4469

Action: No action.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 2.4.1 Page #: 2-27 Line #: 9 to 12
Original Specific Comment #: 2
Comment: The text indicates that the preliminary findings of the predesign studies show that technetium-99 is no longer a contaminant of concern in Area 1, Phase II, but final sample analytical data for this chemical are not yet available. The text provides only limited justification of the conclusion that technetium-99 is no longer a concern. Specifically, the text should explain why earlier indications of the presence of technetium-99 are now considered to be invalid or irrelevant in the STP area. After the final sample analytical data are reviewed, the text should be revised to provide a more detailed explanation of why technetium-99 is no longer a concern in Area 1, Phase II.

Response: See the response to U.S. EPA Original General Comment No. 1.

Action: See the action for U.S. EPA Original General Comment No. 1.

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.

Response: Noted.

Action: The text in Sections 2.0 and 3.0 will be revised to reflect the correct use of arsenic.

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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.

Response: Closure of HWMUs was the topic of specific discussions between DOE, U.S. EPA, and Ohio EPA between November 1997 and January 1998. The resolution of the mechanism for demonstration of HWMU closure is presented in the response to Ohio EPA Comment No. 1 on the July 1997 SEP.

Action: No action.

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.

Response: Such material, if encountered, can be managed through established excavation guidelines. Contingency for the discovery of uranium metal in A1PII is covered under special materials in Table 6-1.

Action: No action.

APPENDIX A
DESIGN CRITERIA PACKAGE FOR REMEDIAL DESIGN SERVICES
REMEDIATION AREA 1, PHASE II
(20710-DC-0001, Rev. E, Nov. 1997)

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 valves

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upstream from the tank fill valves are manual valves and no shutoff valve is present on the tank truck fill line, the pumps would continue pumping and the water would be discharged wherever the open end of the flexible hose is located. Therefore, the text and drawings should be revised to include all the instrumentation and equipment required to control the dewatering pumps.

Response: Noted.

Action: The text and drawings will be revised to include all instrumentation and equipment required for dewatering operations consistent with the action for Ohio EPA Comment No. 73.

APPENDIX B
PREDESIGN INVESTIGATION SUPPORTING INFORMATION

APPENDIX B-1
TABLES

Commenting Organization: U.S. EPA Commentor: Saric
Appendix B-1: Tables Page #: NA Line #: NA
Original Specific Comment #: 7
Comment: The tables in Appendix B-1 appear to be incomplete. The first table does not contain any data qualifiers. If the numbers on Page 4 of the table for trip blanks are actually detections, serious quality control problems are associated with the samples and should be addressed. In addition, the tables contain data qualifiers; however, some of the data qualifiers (such as "NV" and "UNV") are nonstandard and should be defined.

Response: Noted.

Action: The table will be revised accordingly.

Commenting Organization: U.S. EPA Commentor: Saric
Appendix B-1: Table B-2 Page #: 16 Line #: NA
Original Specific Comment #: 8
Comment: Table B-2 indicates that for Sample 103575 from Location ASI-6, the total uranium concentration is 10.4 percent. This result seems unlikely for this portion of the Fernald Environmental Management Project. DOE should confirm the accuracy of this result and revise the text accordingly.

Response: The text reports the concentrations in pCi/g.

Action: No action.

APPENDIX B-3
LETTER REPORT FOR PREDESIGN INVESTIGATION FOR TOTAL URANIUM IN THE SEWAGE TREATMENT PLANT (STP) AREA (20710-RP-0004, Rev. A, Nov. 1997)

Commenting Organization: U.S. EPA — Commentor: Saric
Appendix B-3: Section 5.0 — Page #: 5-1 — Line #: 15 to 20
Original Specific Comment #: 9

Comment: For most of the results in Table 5-1, two methods of analysis separated by "or" are listed with no further explanation. The method actually used to obtain each listed result should be clearly identified. If a sample was analyzed by both methods, both results should be given and any significant differences explained. If a sample was analyzed by one method only, then only that method should be listed. This comment also applies to the complete table of results in Appendix A of Appendix B-3.

Response: Noted. The letter reports have been deleted from the Implementation Plan.

Action: This information has been incorporated into Appendix B-3.

APPENDIX B-4
LETTER REPORT FOR PREDESIGN INVESTIGATION FOR LEAD DELINEATION IN THE AREA 1 PHASE II TRAP RANGE (20710-RP-0002, Rev. A, Nov. 1997)

Commenting Organization: U.S. EPA — Commentor: Saric
Appendix B-4: Exec. Summary and Section 1.1 — Page #: ES-1 and 1-1 — Line #: NA
Original Specific Comment #: 10

Comment: The text in the executive summary and Section 1.1 of the appendix indicates that arsenic is an impurity in lead. As noted in Original Specific Comment No. 3 on Section 3.1.4, arsenic is in fact used as an alloying agent in lead. The text in Appendix B-4 should be revised to reflect this fact.

Response: Noted.

Action: Appendix B-4 has been deleted from the Implementation Plan. Correct text can be found in Section 2.4.2 and in Section 3.3

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

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.

Response: Noted.

Action: Appendix B-4 has been deleted from the Implementation Plan. Correct text can be found in Appendix B-3.

APPENDIX B-6
LETTER REPORT FOR AREA 1, PHASE II
PERCHED WATER SAMPLING AT THE SEWAGE TREATMENT PLANT AREA
(55200-RP-0001, Rev. A, Nov. 1997)

Commenting Organization: U.S. EPA Commentor: Saric
Appendix B-6: Section 1.3 Page #: 1-2 Line #: 5 and 6
Original Specific Comment #: 12
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.

Response: Noted.

Action: Appendix B-6 has been deleted from the Implementation Plan. The figure is included as Figure 2-25 in the revised plan.

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

Response: Noted.

Action: Appendix B-6 has been deleted. Perched water in the Sewage Treatment Plant area is addressed in Section 2.1.3.5.

Commenting Organization: U.S. EPA Commentor: Saric
Appendix B-6: Section 7.2 Page #: 7-1 Line #: 30
Original Specific Comment #: 14
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.

Response: Noted.

Action: Appendix B-6 has been deleted from the Implementation Plan. This comment is addressed in Section 2.3.2.3.

APPENDIX B-7
LETTER REPORT FOR AREA 1, PHASE 2
FIELD SAMPLING OF MISCELLANEOUS AREAS
(20710-RP-0007, Rev. A, Nov. 1997)

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

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.

Response: Noted.

Action: Appendix B-7 has been deleted from the Implementation Plan. This comment is addressed in Section 2.3.2.4.

APPENDIX B-8
LETTER REPORT FOR AREA 1, PHASE II PRE-DESIGN INVESTIGATION SURVEY
(20710-RP-0006, Rev. A, Nov. 1997)

Commenting Organization: U.S. EPA Commentor: Saric
Appendix B-8: Section 1.4 Page #: 1-2 Line #: NA
Original Specific Comment #: 16

Comment: The text defines the scope of the project as determining areas with total uranium concentrations that require remediation. However, Section 2.1 and various tables and figures discuss thorium-232 and radium-226 levels in addition to uranium levels. Section 1.4 should be revised to make it consistent with the rest of Appendix B-8.

Response: Noted. The primary objective was to obtain total uranium data; however, thorium-232 and radium-226 data were also collected.

Action: Appendix B-8 has been deleted from the Implementation Plan. This comment is addressed in Section 2.3.2.5.

APPENDIX B-9
LEACHABILITY STUDIES AND KRIGING METHODS
USED TO DEVELOP ESTIMATED LIMITS OF EXCAVATION

Commenting Organization: U.S. EPA Commentor: Saric
Appendix B-9: Section 3.3 Page #: 4 and 5 Line #: NA
Original Specific Comment #: 17

Comment: The text of this section reflects many critical modeling assumptions; however, many of these assumptions are not clearly stated. For instance, the input stratigraphy distribution of material classified as coarse-grained is assumed to be random in Line 17

of Page 5, but this assumption is not clearly stated. Also, the estimates based on the assumptions are the best estimates. The uncertainties associated with the assumptions should be discussed so the estimates of the material to be remediated can be evaluated with adequate caution.

Response: Noted.

Action: Appendix B-9 has been deleted from the Implementation Plan. The comment is addressed in Section 2.3.1.3.

Commenting Organization: U.S. EPA Commentor: Saric
Appendix B-9: Section 3.3 Page #: 5 Line #: 10
Original Specific Comment #: 18

Comment: The text states that the stratigraphy model has just over 160,000 blocks. However, a calculation using the model location coordinates provided on Lines 5 through 7 and the grid spacing provided on Line 9 (50 times 140 times 51) results in a total of 357,000 blocks. The block coefficient (the ratio of the given number of blocks presented to the number calculated based on an assumption of a complete rectangle) of 0.45 can be explained only by a very irregular shape for the modeled area. The appendix should contain a figure showing the shape of the area actually modeled.

Response: Noted.

Action: Appendix B-9 has been deleted from the Implementation Plan. The figure is included as Figure 2-19 in the current revision.

APPENDIX D
SYSTEMS PLAN FOR REMEDIATION AREA 1, PHASE II
(20710-PL-0003, Rev. C, Nov. 1997)

Commenting Organization: U.S. EPA Commentor: Saric
Appendix D: Section 2.0 Page #: 2 Line #: 6 and 7
Original Specific Comment #: 19

Comment: The text states that "The excavation sump pump will transfer water from the excavation sump to the receiving tank. Minimize sediment loading." It is not clear how the sediment loading to the receiving tanks will be minimized. Typically water pumped out of an excavation contains a high volume of sediment. Without a silt removal tank, all sediment pumped along with the water would end up in the bladder-type receiving tanks, where the sediment will accumulate. The silt and sediment would be difficult to remove from the bladder-type tanks. The text should be revised to discuss the procedures that will be used to minimize sediment buildup in the bladder-type tanks.

Response: The approach to management of perched water and other remediation-generated water from the Sludge Drying Beds/STP excavation area (A1PII Sector 3) under the STP Excavation Package has changed, as has the treatment sequence; see the response and action to Ohio EPA Comment No. 73.

Action: Text will be revised accordingly in the next revision of the Implementation Plan.

Commenting Organization: U.S. EPA Commentor: Saric
Appendix D: Section 3.1 Page #: 3 Line #: NA
Original Specific Comment #: 20
Comment: The text states that "a 5kVA, 480-120/240V, single phase transformer/panel combination is provided with six 20 amp branch circuits." The text does not state the rating of the main circuit breakers in this panel. The text should be revised to identify the rating.

Response: Noted.

Action: Based on the design modifications to implement the approach presented in the response and action for Ohio EPA Comment No. 73, Appendix D will be revised as necessary.

Commenting Organization: U.S. EPA Commentor: Saric
Appendix D: Section 3.2 Page #: 3 and 4 Line #: NA
Original Specific Comment #: 21
Comment: This section describes procedures for checkout of electrical and mechanical systems. However, it does not discuss checkout of instrumentation systems. The text should be revised to describe procedures for instrumentation system checkout.

Response: Checkout of the instrumentation systems will be developed when the System Operability (SO) Test Procedure is developed. The SO test procedure will also include the checkout and testing of all mechanical and electrical components prior to system operations.

Action: See the action for Original Specific Comment No. 20. Detailed checkout procedures will be described in the SO test procedure.

APPENDIX E
AREA 1, PHASE II STRUCTURES AND FACILITIES

Commenting Organization: U.S. EPA Commentor: Saric
Appendix E: Table E-1 Page #: E-15 Line #: NA
Original Specific Comment #: 22
Comment: The text of the "Remarks" column states that the aeration tank is to remain in place. However, the "Remedial Assignment" column cites plans for removal of this structure. This discrepancy should be resolved.

Response: Noted.

Action: Appendix E has been deleted from the Implementation Plan.

APPENDIX F
INTEGRATED MEASUREMENTS APPROACH FOR REMEDIATION AREA 1, PHASE II

Commenting Organization: U.S. EPA Commentor: Saric
Appendix F: Section F.1.2 Page #: F-3 Line #: 22
Original Specific Comment #: 23

Comment: The text in this section of Appendix F states that the hot spot criterion is three times the FRL. This text and Table F-1 should be revised to reflect the continuing discussion of this criterion and to cite the Sitewide Excavation Plan, which will be revised to include a more detailed discussion of the hot spot criterion.

Response: See the response to U.S. EPA Original General Comment No. 2 on the July 1997 Draft Sitewide Excavation Plan (SEP).

Action: In accordance with a suggestion from Ohio EPA on the similar Appendix E to the A2PI IRDP, this Appendix F will be deleted and appropriate text from the appendix will be incorporated into the body of the Implementation Plan in its next revision. See also the action for Ohio EPA Comment No. 120.

Commenting Organization: U.S. EPA Commentor: Saric
Appendix F: Section F.1.4.2.2 Page #: F-10 Line #: 5
Original Specific Comment #: 24

Comment: The discussion of the limitations of the HPGe does not include the fact that it is not yet accepted by the regulatory agencies. The ability of the technology to produce results comparable to laboratory analytical results is still in question. The discussion should be revised to reflect these facts. In addition, the discussion of the RTRAK and radiation scanning system instruments in Section F.1.4.2.3 should be similarly revised.

Response: There has been general agreement between DOE and U.S. EPA expressed in the Real-Time Technical Work Group sessions that RTRAK and HPGe provide accurate and reliable data at data quality levels ASL A and ASL B. However, disagreement still exists between the U.S. EPA and DOE over the use of HPGe for certification analyses at ASL D.

Inasmuch as all RTRAK and HPGe measurements had been specified at ASL A and ASL B data quality levels in Appendix F, that appendix represented a realistic and objective presentation of the usage of in-situ gamma spectrometry measurements. While HPGe measurements are planned in certification activities, Section F.3.5.2 in the draft Implementation Plan clearly indicated that these measurements are part of continuing comparability assessments. Note that per the response and action to Ohio EPA Comment No. 119, Appendix F has been deleted, and text has been included in Section 2.0 as appropriate.

Action: No action. Note the action for Ohio EPA Comment No. 119.

1725

Commenting Organization: U.S. EPA Commentor: Saric
Appendix F: Figure F-2 Page #: NA Line #: 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.

Response: The intent of comparing total uranium data based upon laboratory measurements with total uranium data based upon HPGe measurements was to ascertain if area-specific comparability factors are necessary. A commitment to check for area-specific comparability factors for A1PII and A2PI was made to James Saric by DOE/FDF in a November 1997 meeting. As discussed in Section 3.0 of the July 1997 HPGe Comparability Study, comparability of HPGe and laboratory data is demonstrated by the closeness of the two data sets and by the degree of correlation between the data. Figure F-2 in the draft Implementation Plan demonstrated the degree of correlation. Other discussion in Section F.2.1 demonstrated the degree of closeness.

Because Figure F-2 in the draft Implementation Plan was only intended as a check on area specific comparability, it was not bounded by 95 percent confidence limits. Conversely, the intent of Figures F-1 and F-3 was to establish trigger levels; hence, bounding those plots with 95 percent confidence limits was necessary.

Note that per the response and action to Ohio EPA Comment No. 119, Appendix F has been deleted.

Action: No action. Note the action for Ohio EPA Comment No. 119.

TECHNICAL SPECIFICATIONS FOR REMEDIATION AREA 1, PHASE II SITE PREPARATION AND REMEDIATION PACKAGE (20710-TS-0002, Rev. C, Nov. 1997)

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 02205 Page #: NA Line #: NA
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.

Response: Agricultural drain tiles are typically clay pipe, not concrete; thus, revision of Specification 03316 Concrete Removal to address clay pipe agricultural drainage tiles is inappropriate. Specification 02205 adequately specifies removal of utilities.

Action: Specification 02205 will be modified to include agricultural drainage tiles for consistency with the identified Implementation Plan text.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 02211-3.2.A.2 Page #: 6 Line #: NA
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.

Response: Noted.

Action: Maximum depths for in situ stabilization will be included in the forthcoming Trap Range Remediation design package.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 02270-3.1.B Page #: 8 Line #: NA
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.

Response: The approach to management of perched water and other remediation-generated water from the Sludge Drying Beds/STP excavation area (A1PII Sector 3) under the STP Excavation Package has changed, as has the treatment sequence; see the response and action to Ohio EPA Comment No. 73.

Action: Text in Specification 02270 and design drawings for the STP Excavation Package have been revised to reflect the new approach to management of perched water.

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Commenting Organization: U.S. EPA Commentor: Saric
Section #: 3.0, Table 3-1 Page #: NA Line #: NA
Original Specific Comment #: 29
Comment: The table cites American Society for Testing and Materials (ASTM) Method D5299-42. The date portion of this designation, -42, should be corrected to "-92" or deleted. Deletion of the date portion (as done in Table 3-2) along with addition of a requirement to use the current version of the method is the preferred choice.

Response: Noted. However, the work to be conducted has been completed. (See the response to U.S. EPA General Comment No. 5.) Given that the comment refers to typographical errors and does not impact the Geotechnical Study results, no action is necessary.

Action: No action.

Commenting Organization: U.S. EPA Commentor: Saric
Section #: 3.0, Table 3-2 Page #: NA Line #: NA
Original Specific Comment #: 30

Comment: The table lists ASTM procedures. However, some of the ASTM procedures listed on the table have been renamed. For example, Method D420 is now "Standard Guide to Site Characterization for Engineering, Design, and Construction Purposes," and Method D5084 is "Standard Test Method for Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter." The table should be revised to list the new names of the methods. Also, Method D854, which is cited in Note 1 of Table 3-3, should be included in Table 3-2.

Response: See the response to U.S. EPA Specific Comment No. 29.

Action: See the action to U.S. EPA Specific Comment No. 29.