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OhioEPA

State of Ohio Environmental Protection Agency

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George V. Voinovich
Governor

February 9, 1998

RE: DOE FEMP
COMMENTS: A1 P2 IRDP

Mr. Johnny Reising
U.S. Department of Energy, Fernald Area Office
P.O. Box 538705
Cincinnati, OH 45253-8705

Dear Mr. Reising:

Ohio EPA, in consultation with the Ohio Department of Health - Bureau of Radiation Protection, has reviewed DOE's October 24, 1997 submittal "Integrated Remedial Design Package for Area 2 Phase 1" and December 5, 1997 submittal "Contract DE-AC24-92OR21972, Certified for Construction Technical Specifications and Construction drawings for Area 2, Phase 1 Excavation Package. Attached are comments on these submittals.

If you have any questions, please contact Tom Ontko or me.

Sincerely,

for Tom Ontko

Thomas A. Schneider
Fernald Project Manager
Office of Federal Facilities Oversight

cc: Jim Saric, U.S. EPA
Terry Hagen, FDF
Ruth Vandergrift, ODH
Mark Shupe, HSI GeoTrans
Francie Barker, Tetra Tech EM Inc.
Manager, TPSS/DERR.CO

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Ohio Environmental Protection Agency comments on the
Draft Area 1 Phase II Integrated Remedial Design Package
for Operable Unit 5

Implementation Plan

1) Commenting Organization: OEPA Commentor: OFFO
Section #: General Comment Pg #: Line #: Code: C
Original Comment #
Comment: Ohio EPA recommends a group walk-down of the A1P2 project area during the comment response period. The effort would assist in resolving comments and ensuring that all facilities, structures and issues had been addressed in the design.

2) Commenting Organization: OEPA Commentor: OFFO
Section #: General Comment Pg #: Line #: Code: C
Comment: The IRDP should be revised to incorporate the design for the aesthetic barrier to be placed along Willey Road. Incorporation of the barrier design would ensure coordination of activities and usage of property. In addition, it would provide assurances to local residents that a view similar to that generated by the South Field Extraction/Optimization project would not be repeated. All efforts possible should be extended to expedite placement of the aesthetic barrier to reduce the visual impact of activities.

3) Commenting Organization: OEPA Commentor: OFFO
Section #: General Comment Pg #: Line #: Code: C
Comment: Previously, DOE had committed to providing Ohio EPA electronic copies of design submittals. However that last few designs have been submitted without such electronic copies. Ohio EPA requests DOE resume submittal of electronic copies with or shortly after the paper version.

4) Commenting Organization: OEPA Commentor: OFFO
Section #: General Comment Pg #: Line #: Code: g
Comment: In general, the dust control measures outline in this plan appear to be adequate to minimize the generation of fugitive dusts and if properly implemented would achieve compliance with the 'best available technology' (BAT) requirement of the Ohio Administrative Code (OAC) 3745-31-05(A)(3). This rule has been cited as an ARAR in both the Operable Unit 2 and Operable Unit 5 RODs.
It has been our position that compliance with BAT will be demonstrated by attaining the visible particulate emission limitations of OAC 3745-17-12. These limitations are more stringent than OAC 3745 -17-07 (B)(4),(5), and (6) which are referenced in Table A-2 of the Plan. Test methods to measure compliance with the rule can be found in 40 CFR Part 60 Appendix A Method 22 and Method 9.
There are three air emission documents referenced in this plan. The Technical Specifications in several locations refers to 'Part 6', but we have not been able to locate it in your submittal. The

Contractor is to submit a Dust Control Plan. Ohio EPA would like the opportunity to review and approve this Plan. There are several references to "Fugitive Dust Control Requirements" (RM 0047)". Please provide a copy of this, too.

5) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: general Pg #: Line #: Code:
Comment: The data presentation throughout the Plan is very hard to use even when the data are present. The tabulated data is hard to correlate with the data presented in the figures. At times, there was much more data in tables than is presented in the figures. The tabulated data is very hard to use and interpret and is not much help in our review. We have asked for electronic data files in another comment.
The most helpful and accessable method of displaying these data are posting them to the Soils Remediation Project web site. This is very easy to use. However, some of the links to the various pages are not active. The displays of both the discrete data and the RTRAK results are very helpful as is the interactive map/data base access features for Area 2 Phase I.

6) Commenting Organization: OEPA Commentor: OFFO
Section #: Exec. Sum Pg #: ES-1 Line #: 25-26 Code: C
Comment: It is unclear from the document which OU3 Implementation Plan will address the trap range building or the schedule for it's removal. Please clarify.

7) Commenting Organization: OEPA Commentor: OFFO
Section #: Exec.Sum Pg #: ES-4 Line #: 19-20 Code: C
Comment: Ohio EPA was under the impression that DOE would be including restoration design within the IRDP. Additional clarification should be provided regarding the submittal which will include restoration plans for A1P2. In order to achieve the greatest efficiency in incorporating restoration into the remediation, it seems appropriate to include restoration planning in the IRDP.

8) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #: Tab. of Con. Pg. #: ii Line # Code: E
Comment: Section numbers 2.3.4.1 and 2.3.4 are repeated in the numbering system.

9) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #: Tab. of Con. Pg. #: ix Line # Code: E
Comment: "CSSA", "ISSA", "SSA", and "FRL" are not included in the List of Acronyms and Abbreviations.

10) Commenting Organization: OEPA Commentor: OFFO

Section #: 1.0 Pg #:1-1 Line #: 23-27 Code: C
Comment: The document should be revised to note A1P1 is awaiting a DOE revision and submittal to EPAs. DOE received comments from the agencies months ago regarding the A1P1 certification report. EPA approval is not pending, DOE response is pending. Additionally, the paragraph incorrectly suggests the sediment traps are the only outstanding issue within A1P1. The remaining portions of the North Access Road are an outstanding issue as well.

11) Commenting Organization: OEPA Commentor: OFFO
Section #: 1.0 Pg #:1-3 Line #: 21-23 Code: C
Comment: The text should be revised to incorporate the option of disposal at the Nevada Test Site.

12) Commenting Organization: OEPA Commentor: OFFO
Section #: 1.2 Pg #: 1-4 Line #: 11-14 Code: C
Comment: The text should reference the recently developed SEP methodology for determining if off-site investigation/remediation/certification is appropriate.

13) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #: 1.0 Pg. #: 1-5 Line # Code: C
Comment: A figure showing the STP area exclusively should be included and referenced in the discussion in Section 1.2.1.1.

14) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #: 1.0 Pg. #: 1-6 Line # 26 Code: E
Comment: The reference to Section 2.1.1 is unclear and should be checked. The discussion in Section 2.1.1 does not appear relevant to the discussion in the referenced text.

15) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #: 1.0 Pg. #: 1-6 Line # 27 Code: C

Comment: The indicated area and volumes of lead contaminated soil at the Trap Range are inconsistent with the amounts given in Technical Specification 3.2.A.1. For example, the total remediation area given in the text is "over approximately 3.7 acres which contradicts the 3.5 acres indicated in the specification.

16) Commenting Organization: OEPA Commentor: OFFO
Section #: 1.2.1.4 Pg #: 1-7 Line #: 20-21 Code: C
Comment: The text suggests the steel lattice tower and wood poles will be removed "before

A1PII remediaton begins." Is this correct or will they be removed prior to remediation of the STP area? Some A1PII activities have already been initiated such as sampling and soil removal in the areas near the OSDF.

17) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section # : 1.0 Pg. #: 1-12 Lines # 9,10,33 Code: E
Comment: Section references are incorrect; 3.1.5 and 3.3.5 should replace 3.1.4 and 3.3.4 in lines 9 and 10, respectively, and 3.1.4 and 3.3.4 should replace 3.1.3 and 3.3.4 in line 33.

18) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #: 1.0 Pg. #: 1-13 Line # 33 Code: C
Comment: The perched and storm water treatment sequence presented in the referenced text should be revised to include sediment filtration prior to GAC.

19) Commenting Organization: OEPA Commentor: OFFO
Section #:1.4 Pg #:1-4 Line #: 21-23 Code: C
Comment: It would seem appropriate and most efficient to complete restoration of any area in which remedial activities have been completed rather than wait for the end of OSDF construction. If restoration is to be efficiently integrated with remediation, it should follow immediately or during the next field season.

20) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:1.0 Pg. #: 1-14 Line # 23 Code: E
Comment: Section reference 3.1.7 and 3.3.7 should be replaced by 3.1.8 and 3.3.8 respectively.

21) Commenting Organization: OEPA Commentor: OFFO
Section #: 2.0 Pg #: 2-1 Line #: 42 Code: C
Comment: Ohio EPA believes it is essential for the complete pre-design data set to be utilized in developing the design. The revised design package should include and incorporate all pre-design investigation data.

22) Commenting Organization: OEPA Commentor: OFFO
Section #: 2.2.1 Pg #: 6 Line #:27-33 Code: C
Comment: Ohio EPA believes the approach utilized to evaluate contamination may have significantly underestimated the extent of needed remediation. Simply sampling for uranium leaves out two very important contaminants, radium and thorium, that may very well drive the surface remediation in the area of the STP, including off-site areas. Ohio EPA recommends additional analysis for radium and thorium to evaluate the need for off-site sampling.

23) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:2.0 Pg. #: 2-2 Line # 16 Code: E
Comment: Figure B-2 should replace B-3.

24) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:2.0 Pg. #: 2-6 Line # 3 Code: E
Comment: The referenced acronym "PEPS" should be replaced with the acronym "PSP."

25) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:2.0 Pg. #: 2-7 Line # 22 Code: E
Comment: Delete the text "at locations" from the sentence beginning on this line.

26) Commenting Organization: OEPA Commentor: OFFO
Section #: 2.2.2 Pg #: 2-8 Line #: 10-11 Code: C
Comment: The text should include a discussion of the below 400 ppm total lead concentration which failed TCLP. This information is relevant if the soil would be removed for any reason including excavation of the borrow pit.

27) Commenting Organization: OEPA Commentor: OFFO
Section #: 2.2.2 Pg #: 2-8 Line #: 19-28 Code: C
Comment: This text is not consistent with the specifications package which describes removal of the >200ppm soil for use in the OSDF. This area lies within the planned borrow area suggesting it will be excavated at some future point thus generating a hazardous waste. Additionally, it will be important to remove and dispose of the >200ppm lead soils because the BTV concentration of 200ppm.

28) Commenting Organization: OEPA Commentor: OFFO
Section #:2.2.3 Pg #: 2-9 Line #: 14-15 Code: C
Comment: Ohio EPA understands that Tc-99 results were detected adjacent to one of the trickling filters. This section must be revised appropriately as well as revising the excavation and disposal plans. This is a good example of the need to have a complete pre-design data set before development and submittal of design packages.

29) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:2.0 Pg. #: 2-10 Line # 4 Code: E
Comment: Indicate the units for the total uranium detection limits discussed in this sentence to be "ppm".

30) Commenting Organization: OEPA Commentor: OFFO
Section #: 2.2.5 Pg #: 2-10 Line #: 22-28 Code: C
Original Comment #
Comment: Again, analysis for only total uranium may have led significantly underestimating the need for conducting remediation on and off-property for thorium and radium. Additional data on these contaminants is needed.

31) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:2.0 Pg. #: 2-11 Line # 8 Code: E
Comment: Figure 1-2 could not be located in Appendix B-8.

32) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:2.0 Pg. #: 2-12 Line # 29 Code: E
Comment: "Storm Sewer Outfall Ditch SSOD" should be revised to read "Storm Sewer Outfall Ditch (SSOD)."

33) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:2.0 Pg. #: 2-14 Line # 13-19 Code: C
Comment: Figure 2-9 indicates a 26 foot deep excavation at the primary settling basins which is contradiction to the 20 feet stated in the referenced text. The 20 foot excavation depth is indicated at several other places in the text. If the 26 foot figure is correct, only four feet of till will remain over the GMA rather than the 10 foot thickness indicated in the text.

34) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:2.0 Pg. #: 2-16 Line # 30 Code: E
Comment: The figure reference indicated in the sentence ending on this line should be Figure 2-3 rather than 2-2.

35) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:2.0 Pg. #: 2-17 Line # 4 Code: E
Comment: The sentence beginning on this line does not make sense.

36) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:2.0 Pg. #: 2-17 Line # 9 Code: E
Comment: The paragraph beginning on this line should be checked in its entirety for verb tenses and plural versus singular word forms (e.g., "11 radio nuclides, 8 inorganics...").

37) Commenting Organization: OEPA Commentor: OFFO

Section #: 2.3.4.1 Pg #: 2-19 Line #: 13-14 Code: C
Comment: This section is supposed to discuss Sector 1 though Sector 2 is referenced. Please clariy.

38) Commenting Organization: OEPA Commentor: OFFO
Section #: 2.3.4.1 Pg #: 2-19 Line #: 16-24 Code: C
Comment: To the extent practical, Ohio EPA recommends limiting the number of additional roads installed. Additional gravel roads will result in more removals necessary to implement restoration activities and will require additional dust control activities during remedial actions.

39) Commenting Organization: OEPA Commentor: OFFO
Section #: 2.3.4.1 Pg #: 2-20 Line #: 7-10 Code: C
Comment: a) The text should discuss whether appropriate cultural resource reviews of the foundations have been conducted. Additionally the known foundations should be included in the figures and drawings.
b) How will DOE differentiate between debris that results from former building foundations and any debris that may have been placed in the field as a result of site operations?

40) Commenting Organization: OEPA Commentor: OFFO
Section #: 2.3.4.1 Pg #: 2-20 Line #: 19-24 Code: C
Comment: a)The referenced sediment traps are not presented on Figure 2-5 as suggested in the previous paragraph.
b)As stated in other comments, Ohio EPA does not concur with the proposed course of action for the sediment traps and recommends DOE revised the approach to utilize the area for wetland mitigation.

41) Commenting Organization: OEPA Commentor: OFFO
Section #: 2.3.4.1 Pg #: 2-21 Line #: 13-17 Code: C
Comment: It is unclear if the reference to Sector 2 in this paragraph is intentional or a typo. Please clarify when drainage tile will be removed.

42) Commenting Organization: OEPA Commentor: OFFO
Section #: 2.3.4.1 Pg #: 2-21 Line #: 19-24 Code: C
Comment: Additional detail should be provided regarding the approach to be used for certifying the road. As noted in Ohio EPA's comments on the A1P1, we will not approve a certification report that includes areas not yet removed/remediated.

43) Commenting Organization: OEPA Commentor: OFFO

Section #: 2.3.4.1 Pg #: 2-21 Line #: 26-29 Code: C
Comment: What data does DOE have to support an assessment that backfill used for the leachate conveyance line was not contaminated? How will this issue be addressed?

44) Commenting Organization: OEPA Commentor: OFFO
Section #: 2.3.4.1 Pg #: 2-25 Line #: 20-24 Code: C
Comment: It is unclear whether the gravel roads in the vicinity of the STP existed prior to the STP removal action. If the roads existed prior to the removal action and were not remediated with adjacent soils then it is likely contamination exists within and/or under the road beds. Unless physical samples were collected of the road bed material and subgrade material then sufficient data is not available to support the conclusion that the material is below FRLs.

45) Commenting Organization: OEPA Commentor: OFFO
Section #: 2.3.4 Pg #: 2-26 Line #: 6-10 Code: C
Comment: The text suggests that Figures 2-7 & -8 delineate the wells to be abandoned. The figures do not differentiate between to be abandoned and remaining wells. The figures should be revised to show which wells are being abandoned.

46) Commenting Organization: OEPA Commentor: OFFO
Section #: 2.4.1 Pg #: 2-27 Line #: 11-12 Code: C
Comment: The IRDP should be revised to incorporate all final data. Final data is needed to support the design.

47) Commenting Organization: OEPA Commentor: OFFO
Section #: 2.4.1 Pg #: 2-27 Line #: 17-18 Code: C
Comment: Ohio EPA believes this assumption may have led to a substantial flaw in the design. Considering the operation of the STP incinerator and the results of the A1P1 remediation, it is likely that in most areas of A1P2 the excavation driver will be radium or thorium not uranium. Ohio EPA recommends a complete reassessment of the design and pre-design sampling efforts to evaluate the effects of these contaminants on remediaton.

48) Commenting Organization: OEPA Commentor: OFFO
Section #: 2.4.1 Pg #: 2-27 Line #: 28-31 Code: C
Comment: The area needs to be bounded for this design submittal. The design packages is supposed to define the remediation activities thus defining the boundaries of excavation is essential for agency concurrence. Revised the document to incorporate sufficient data for excavation bounding.

49) Commenting Organization: OEPA Commentor: OFFO
Section #: 2.5.2 Pg #: 2-28 Line #: 18-22 Code: C
Comment: Ohio EPA recommends excavation of the soils out to the 200ppm contour. This excavation would be consistent with the BTV criteria. If the 200ppm contour is not used then DOE needs to develop a method to track the ultimate disposition location of this soil to ensure it is not utilized in an area that would be subject to ecological receptors. Additionally, the excavation must at a minimum encompass all lead that may fail the TCLP test. The reason for this is the soil will be excavated either for remediation or for borrow and would thus generate a hazardous waste.

50) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:2.0 Pg. #: Fig. 2-3 Line # Code: C
Comment: This figure should be revised to indicate that the Great Miami Aquifer material shown is coarse grained and is unsaturated.

51) Commenting Organization: OEPA Commentor: OFFO
Section #: Figure 2-5 Pg #: Line #: Code: C
Comment: The figure should be revised to label/include all piles, sediment basins, parking lots, trailers, etc. At present it does not appear to be a comprehensive presentation of all structures/facilities.

52) Commenting Organization: OEPA Commentor: OFFO
Section #: Figure 2-6 Pg #: Line #: Code: C
Comment: The figure should be revised to label/include all piles, sediment basins, parking lots, trailers, etc. At present it does not appear to be a comprehensive presentation of all structures/facilities. Additionally, show the lattice tower to be removed.

53) Commenting Organization: OEPA Commentor: OFFO
Section #: Figure 2-7 Pg #: Line #: Code: C
Comment: In order to ensure it is protected, the figure should be revised to include Ohio EPA's air particulate monitor station along the eastern fence line of the site

54) Commenting Organization: OEPA Commentor: OFFO
Section #: Figure 2-12 Pg #: Line #: Code: C
Comment: A figure should be provided within the section that provides bounding data for all the areas shown to exceed the FRL.

55) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.

Section #:3.0 Pg. #: 3-4 Line # 34 Code: E
Comment: The text should be revised from "construction drawings Dwg G0001" to "construction drawings (Dwg G0001)."

56) Commenting Organization: OEPA Commentor: OFFO
Section #: 3.1.2.3 Pg #:3-5 Line #:33-35 Code: C
Comment: Please describe how stump removal within the Trap Range remediation area will be coordinated with treatment. Describe how removal of stumps will affect the ability to complete treatment.

57) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:3.0 Pg. #: 3-6 Line # 28 Code: E
Comment: For clarity, the culvert mentioned in the referenced text should be identified as a five pipe culvert as indicated on Dwg G0019.

58) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:3.0 Pg. #: 3-7 Line # 14 Code: E
Comment: The second "as appropriate" is redundant.

59) Commenting Organization: OEPA Commentor: OFFO
Section #: 3.1.4.2 Pg #:3-12 Line #: Code: C
Comment: The document does not sufficiently support the use of in-situ stabilization. Additional detail is required regarding additives, mixing, documented successes, etc. Phosphate stabilization of lead-contaminated soils is a proven technology when performed as a batch operation, but we are not aware of documented successes of this method applied in situ. The included detail is insufficient to provide concurrence with the treatment approach. Any treatability work plan must be reviewed and approved by the agencies as well as a treatment plan for the area. Ohio EPA is especially interested in evidence that treatment occurs rather than simple dilution or homogenization.

60) Commenting Organization: OEPA Commentor: OFFO
Section #: 3.1.4.3 Pg #:3-12 Line #:17-20 Code: C
Comment: The document should be revised to include the sampling details for confirmation that treatment has been successful. Information regarding sample number, location, statistics, etc. should be provided in the IRDP for agency review and approval.

61) Commenting Organization: OEPA Commentor: OFFO
Section #: 3.1.8 Pg #:3-14 Line #: Code: C

Comment: Ohio EPA believes the current seeding specification may negatively impact final restoration and should be revised. Ohio EPA proposes evaluating seeding/stabilization requirements based upon the duration the area will remain undisturbed. For areas that will be disturbed within a period of 2 years following seeding, Ohio EPA recommends use of a crusting agent for all soils going to the OSDF and for other areas use of temporary seeding (annual rye). For areas in which disturbance is not expected within 2 years, Ohio EPA recommends the use of native prairie grasses for revegetation and stabilization. Prairie grasses should be sown using a seed drill at a rate of 10 lbs/acre into a prepared bed and covered with blown straw mulch at a rate of 2 tons/acre. No fertilizer is recommended when planting these grasses. The grass mixture should include Canada Wild Rye, Little Bluestem, Big Bluestem, Indian Grass, Switch Grass, Side-Oats Grama; proposed ratio of 2:2:3:2:0.5:0.5, respectively. Use of native prairie grasses will hopefully support final restoration as well provide some temporary habitat to compensate for the large losses of habitat occurring during remediation. Ohio EPA hopes to work with DOE to optimize the seeding mixture and planting time over the course of site remediation, therefore to the extent practical contracts should allow flexibility in seeding mixture and planting time.

62) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:3.0 Pg. #: 3-23 Line # 39 Code: E
Comment: Revise "eclectic conduits" to "electric conduits."

63) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:3.0 Pg. #: 3-27 Line # 1 Code: C
Comment: It is unclear why the existing 12-inch diameter AWWT line is referred to as an "effluent" line given its revised role as a transfer line.

64) Commenting Organization: OEPA Commentor: OFFO
Section #: 3.3.2.9 Pg #:3-27 Line #:1-7 Code: C
Comment: The section should include a discussion of the facility removal and certification.

65) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:3.0 Pg. #: 3-27 Line # 25 Code: E
Comment: Revise "...Sector 3 (Dwg 0012)" to "...Sector 3 (Dwg G0012)."

66) Commenting Organization: OEPA Commentor: OFFO
Section #: 3.3.4.3 Pg #:3-34 Line #:27-30 Code: C
Comment: The basis for conducting real-time scans after the excavation of 2.5' of soil is not clear to the reviewer. The real-time scan should occur prior to soil removal to ensure the 2.5' of material doesn't exceed WAC.

67) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:3.0 Pg. #: 3-35 Line # 18 Code: C
Comment: What PID levels are considered to indicate the presence of free organic liquids? Above WAC contamination may be exist in the soil without the presence of free organic liquids. The section should be revised to be consistent with the OU5 ROD and the SEP.

68) Commenting Organization: OEPA Commentor: OFFO
Section #: 3.3.4.5 Pg #:3-36 Line #: Code: C
Comment: The section should be reviewed/revised to ensure consistency with the SEP and WAC plan following their approval by the regulators.

69) Commenting Organization: OEPA Commentor: OFFO
Section #: 3.3.5.2 Pg #:3-38 Line #: Code: C
Comment: The section should be reviewed/revised to ensure consistency with the SEP and WAC plan following their approval by the regulators.

70) Commenting Organization: OEPA Commentor: OFFO
Section #: 3.3.7 Pg #:3-39 Line #: Code: C
Comment: Ohio EPA does not concur with the proposed strategy for HWMU closure. A minimum of 8 samples within the HWMU excavation is required. Additionally the samples must come from a combination of excavation floor and wall locations. The proposed sampling grid for the unit must be submitted to Ohio EPA for review and approval.

71) Commenting Organization: OEPA Commentor: OFFO
Section #: 3.3.8 Pg #:3-39 Line #: Code: C
Comment: Insufficient design detail has been provided regarding the proposed A1P2 borrow area. The IRDP should be revised to provide additional detail regarding depth of excavation, grading, drainage, etc.

72) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:3.0 Pg. #: General Line # Code: C
Comment: The use of different contractors to excavate soil under stockpiles, provide stabilization, provide vegetative cover, etc. is confusing. For clarity, Section 3.0 should include a table specifying each contractor and their respective duties.

73) Commenting Organization: OEPA Commentor: OFFO
Section #: 3.4.4 Pg #:3-43 Line #: 24-25 Code: C

Comment: The appropriate standard for determining detection should be the Method Detection Limit rather than the CRDL in cases where the MDL is less than the CRDL.

74) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:3.0 Pg. #: 3-43 Line # 43 Code: C
Comment: The analyses for tetrachloroethene should include its biodegradation daughter products (e.g., cis 1,2-dichloroethene, trans 1,2-dichloroethene, 1,1-dichloroethene, and vinyl chloride). Pre-treatment actions should be initiated if any of these compounds also are detected above their respective CRDLs.

75) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:3.0 Pg. #: Fig. 3-5 Line # Code: E
Comment: Note 6 has redundant text ("and stage").

76) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:3.0 Pg. #: Fig. 3-7 Line # Code: E
Comment: Note 5 is incomplete (no figure referenced).

77) Commenting Organization: OEPA Commentor: OFFO
Section #: 4.1.2 Pg #:4-2 Line #: Code: C
Comment: Natural resource impact monitoring should measure against the values and time frames defined in the Habitat Equivalency Analysis within the Natural Resource Restoration Plan. Ohio EPA comments on the most recent IEMP quarterly report provide additional concerns on natural resource monitoring.

78) Commenting Organization: OEPA Commentor: OFFO
Section #: 4.2.3.2 Pg #:4-7 Line #: Code: C
Comment: Considering the close proximity of the STP to the property line, it is unlikely the IEMP monitoring network would comprehensively monitor STP remediation activities. The section should include a map of the project area and existing monitoring locations with a discussion of the adequacy of the monitors to measure emissions from the STP remediation.

79) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:6.0 Pg. #:6-12 Line # 18 Code: C
Comment: The Health and Safety representative's organization (subcontractor, FDF, etc.) should be indicated in the text.

Comments on Appendices

Appendix A · Design Criteria Package

80) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. A Pg. #:1-3 Line # 9 Code: C
Comment: The word "potentially" should be deleted from the text as TCLP testing has revealed above characteristic levels of lead and arsenic.

81) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. A Pg. #:1-3 Line # 33 Code: C
Comment: While one "design package" includes the upcoming Area 1 Phase II work, several different contractors will have various responsibilities. The text should be revised to clarify this point.

82) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. A Pg. #:Tab. A-2 Line # Code: E
Comment: This table should include a key defining the meaning of the abbreviations (e.g., appl, R&A, etc.) and symbols (e.g., check marks) used.

Appedix B-1 Tables

83) Commenting Organization: OEPA Commentor: OFFO
Section #: Appendix B, Table B-1 Pg #: Line #: Code: C
Comment: a) A number of the values reported in this table are ug/L. Are these values for TCLP tests or for liquids from the sludge drying beds?
b) The Waste Mgmt. Project Number suggests these samples were taken for NTS criteria. What is the objective of such sampling, if the waste is know to be a listed RCRA waste and thus unlikely to be disposed at NTS?
c) A number of the organic contaminants are reported at a value of 25 ug/L. It is unlikely such a consistent concentration was detected. Clarify if these are detections or simply reporting the detection limit.

84) Commenting Organization: OEPA Commentor: OFFO
Section #:Appendix B, Table B-2 Pg #: Line #: Code: C
Comment: a) No figure within the Appendix provides a comprehensive view of the sample locations reported in the table.
b) A number of data points within the table would seem to contradict DOE's assertion that all contaminants exceeding FRLs lie within the uranium footprint. A number of instances are included in which Ra-226 or Th-232 exceed their respective FRLs while uranium exists at

concentrations below 50 ppm. Obviously it is not possible to compare these data to the excavation boundaries as no figure is provided to show both data and excavation boundaries. The data does support Ohio EPA's concern that the predesign investigations inappropriately focused primarily on total uranium rather than equally focusing on uranium, radium and thorium contaminants.

86) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Figure 5-1 Pg #: Line #: Code: c
Comment: It is difficult to resolve the figure with the text. It is hard to see how the data justifies the 400 ppm lead contour. At several data points to the west of the excavated area, it looks like the contours have been extended outward until a data point less than 400 ppm is reached. At other locations(to the north and northeast fro example) it looks like kriging was used. Please clarify how the excavation extent was determined.
Justify also the "peninsula" to the east of the trap range and the isolated "island" to the east.
The easiest method to present the excavation limits may be to post all of the surficial results to a map that also shows the proposed excavation extent. There are very much more data in Appendix A than are shown in Figure 5-1.

Appendix B-3 Total Uranium in the STP Area

87) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. B-3 Pg. #: Tab. A Line # Code: E
Comment: The total uranium concentration for Sample A1P2STP-12290-32-R is missing from this table.

Appendix B-4 Lead Delineation in Trap Range

88) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. B-4 Pg. #: ES-1 Line #12 Code: C
Comment: This text indicates that excavation and removal of lead contaminated soil is the preferred remedy for the Trap Range. This statement is inconsistent with the text in Section 3.1.4.1 which states that in situ stabilization is the selected remedial approach.

89) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. B-4 Pg. #: 1-2 Line # 10 Code: E
Comment: Revise "...soil concentrations exceeded 100 mg/k" to "...soil concentrations exceeded 100 mg/kg."

90) Commenting Organization: OEPA Commentor: OFFO/HSI-GeoTrans, Inc.
Section #:App. B-4 Pg. #: Tab. 5-1 Line # 8 Code: C
Comment: Four near surface (zero to six inch) samples exceeded the TCLP limit. One six to 12 inch sample exceeded the TCLP limit but not the FRL. These results should be discussed in the text. Include within the text a table presenting all TCLP samples and their associated total lead values.

91) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. B-4 Pg. #: Tab. 5-1 Line # Code: E
Comment: The last two sample numbers are incorrect and should be revised to A1P2TRAP-28-2 and A1P2TRAP-33, respectively.

92) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. B-4 Pg. #: Fig. 5-1 Line # Code: C
Comment: A separate figure showing te sampling and analysis results for the six to 12 inch sampling interval should be provided.

93) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. B-4 Pg. #: Fig. 5-1 Line # Code: C
Comment: The lower interval shown in the legend should be revised to read "6 - 12"." This figure appears to show a mix of recent and RI/FS data. The use of RI/FS data at selected locations where recent data are available should be explained. Additionally, to facilitate comparison of this figure with the tabulated sample results, it should be scaled and oriented identical to Figure 2-1 showing the sample locations.

94) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. B-4 Pg. #: App. A Line # Code: C
Comment: To facilitate comparison between the data shown in this table and on Figure 5-1, concentration results should be reported to the same number of significant figures. Many of the tabulated values appear to have been rounded and are inconsistent with those shown on the figure.

Appendix B-5 Tc-99 inthe STP Area

95) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Pg #: Line #: Code: general
Comment: The arguments presented which cast doubts on the previous Tc-99 hits are persuasive. We await the lab results.

96) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. B-5 Pg. #: ES-1 Line # 32 Code: E
Comment: Revise "...radionuclides including including" to "radionuclides including."

97) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. B-5 Pg. #: 1-2 Line # 4 Code: C
Comment: The depths and contamination levels at the three locations mentioned in the text are not shown on Figure 1-1.

98) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. B-5 Pg. #: 1-2 Line # 10 Code: C
Comment: The text is incorrect to state that the purpose of the PSP was to confirm the results of previous investigations. The stated purpose as outlined on the previous page was to demonstrate that the previous investigation results were inaccurate.

99) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. B-5 Pg. #: 2-2 Line # 28 Code: C
Comment: The text suggests that bedrock was encountered at the depth of the deepest sampling interval (three feet) which requires some explanation. According to Section 2.3.2, the top of bedrock occurs at a depth of approximately 200 feet.

100) Commenting Organization: OEPA Commentor: OFFO
Section #: Appendix B-5 Pg #:5-1 Line #: Code: C
Comment: Throughout the Implementation Plan DOE concluded that preliminary data showed no Tc-99 hits, never did it suggest this was because there was no data. Prior to resubmittal of the document DOE must include all data and discuss its impact on the previously proposed and obviously limited design.

Appendix B-6 Perched Water

101) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. B-6 Pg. #: ES-1 Line # 24 Code: C
Comment: The statement that residual VOC contamination has since been biodegraded references no sampling of degradation compounds, field studies, or analyses to provide support.

102) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. B-6 Pg. #: 1-1 Line # 17 Code: C
Comment: The locations of the six monitoring wells should be shown on a figure with the relevant VOC data posted. Specific dates of the sampling should be noted. Construction

information for the wells should be summarized in a table.

103) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. B-6 Pg. #: 1-2 Line # 6 Code: C
Comment: Figure 1-1 could not be located.

104) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. B-6 Pg. #: 1-2 Line # 18 Code: E
Comment: The sentence beginning on the indicated line is redundant with the immediately preceding sentence.

105) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. B-6 Pg. #: 2-1 Line # 20 Code: E
Comment: Change "Swage" to "Sewage."

106) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. B-6 Pg. #: 7-2 Line # 4 Code: C
Comment: The conclusion that the perched groundwater may no longer be contaminated with VOCs is not readily substantiated by the results of this investigation because it is based on just two borings and perched water samples. In addition, no results from previous investigations are quantitatively presented for review.

Appendix B-7 Miscellaneous Areas

107) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. B-7 Pg. #: General Line # Code: E
Comment: The report given in Appendix B-7 does not have a results section. In addition, there are numerous instances of improper word usage and tense throughout.

108) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 1.4 Pg #: 1-4 Line #: 26 Code: c
Comment: Technetium-99 is also a potential WAC concern.

109) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 1.4 Pg #: 1-5 Line #: 1 Code: c
Comment: The Operable Unit 3 ROD does allow asphalt from the process area to be disposed in the OSDF but the Waste Acceptance Criteria for debris included a visual inspection for the presence of process residues. All asphalt from the FEMP should not be presumed to categorically

meet WAC and be acceptable for the OSDF.

101) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 1.4 Pg #: 1-5 Line #: 10 Code: c
Comment: If the pipeline is not sampled in the STP area, how will WAC compliance be verified?

102) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. B-7 Pg. #: 2-2 Line # 9 Code: E
Comment: Revise "...conditions required amoving borehole" to "...conditions required moving a borehole."

103) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.2.4 Pg #: 2-4 Line #: 20 Code: c
Comment: Is there a typo in bullet 3? Should that be, "The 10% of the data reported with the certificate and the QA/QC results will be validated to ASL D" not ASL B as in the text?

104) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #: App. B-7 Pg. #: 2-2 to 2-6 Line # Code: E
Comment: The sections on these pages are intended to describe an investigation that has been conducted but are written in future verb tense. They, therefore, are considered not reviewable.

Appendix B-8 Soils Scans

105) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Figure 4 Pg #: text on page 2-1 Line #: bottom of page Code: c
Comment: The high-lighted areas on Figure 4 do not support the text on page 2-1 which states "Based on this data radium-226 is not believed to be a contaminant of concern in the area that would require remediation." Figure 4 shows several high-lighted areas with radium-226 concentrations greater than 1.57pCi/g. (The use of 1.57 pCi/g is not explained in the text but presumably this value represents the trigger level.)

Appendix B-9 Leaching/Kriging

106) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Leaching/kriging Pg #: Line #: Code: general
Comment: The Appendix does not add much useful information to that presented in the body of the text. Figure 2-1 shows that only five points are available with which to decide the limits of the low Kd excavation. It is unclear why the eastward extent of the low Kd area does not extend

further eastward all the way to the locations of the higher Kd results. Similiarly, we do not understand how only 5 data points allow the western boundary of the low Kd area to be located. With no data further to the west, any westward limit to this area appears arbitrary.

107) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. B-9 Pg. #: General Line # Code: C
Comment: The types of semivariogram models (e.g., spherical, gaussian, etc.) used for each of the modeled data sets (stratigraphy data, total uranium data, and trap range lead data) should be indicated. In each case, the text should provide a graphic representation of the plotted data versus the chosen model. In addition to the graphic presentation, the validity of the model should be assessed in the report quantitatively. The report should also include a summary of the raw data used in each kriging instance. The summary should include a discussion of distributional assumptions, nondetect treatment, and possible outlier identification.

108) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. B-9 Pg. #: 3 Line # 27 Code: E
Comment: Revise "...variability in several directions, ." to "...variability in several directions."

109) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. B-9 Pg. #: 8 Line # 16 Code: E
Comment: Revise "...400 p.m." to "...400 ppm."

Appendix C Surface water Management

110) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. C Pg. #: General Line # Code: C
Comment:The complete Table of Contents should be at the beginning of the section. Appendix B (Drainage Area Map) should be appropriately listed and referenced in the text.

111) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. C Pg. #: 2-2 Line # 18 Code: C
Comment:The dike material is indicated as clay or clay like material and only compaction testing is required as a specification. In place permeability specifications should also be developed and required.

112) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. C Pg. #: 4-4 Line # 2 Code: C
Comment:If an overflow situation does occur, the South Access Road will be flooded. A spillway

built into the road should, therefore, be considered.

113) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. C Pg. #: A-1 Line #31 Code: E
Comment: Change "...with a basin sediment basin" to "...with a sediment basin."

114) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. C Pg. #: A-2 Line #20 Code: C, E
Comment:Change "...may factors" to "...many factors." The many factors should be briefly summarized.

Appendix D Systems Plan

115) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. D Pg. #: 6 Line #8 Code: C
Comment:The note given in the referenced text should be revised to indicate that the pump leads should be disconnected prior to conducting tests 1 through 3 rather than tests 1 through 4. Test 4 cannot be conducted with the leads disconnected.

Appendix E Structures and Facilities

116) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. E Pg. #: E-2 Line # Code: C
Comment:For the AWWT Effluent Line, a remark should be added regarding its use as an influent line from the temporary tanks to the AWWT.

117) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. E Pg. #: E-13 Line # Code: C
Comment:Older trickling filters (such as may be present at the STP) may have a significant volume of mercury in the rotary arm seal. Has this possibility been addressed?

118) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #:App. E Pg. #: Tab. E-2 Line # Code: C
Comment:Wells 2051, 31217, and 41217 are included in Table 4.1 but are missing from this table. Table E-2 should be revised to include the missing wells.

Appendix F Integrated Measurements Approach

119) Commenting Organization: Ohio EPA Commentor: OFFO

Section #: Pg #: Line #: Code: general
Comment: The uses of the in-situ gamma spectroscopy methods have not been approved by the regulators. Hopefully, some progress will be made after the review of the deliverables refered to in the "path forward" letter (DOE-0225-98). Until these deliverables are reviewed and approved, the final uses of teh in-situ gamma methods are uncertain.

120) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: F-1 Pg #: F-1 Line #: 11 Code: c
Comment: The hot-spot issues has not been finally resolved. The most recent discussions between DOE and the regulators leaned more strongly toward an area-weighted approach (the 100/A**2 criteria used in DOE orders cited as an ARAR in the OU5 ROD). Ohio EPA has never indicated that the 3XFRL criteria stated in the text would be acceptable.

121) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: F.1.3.1 Pg #: F-5 Line #: 14 Code: c
Comment: The justification for comparing the 95%UCL to the FRL as a means of establishing that the method meets the reqirments of ASL D is unclear. Please justify the use of this criteria.

122) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: F.3.1.1 Pg #: F-13 Line #: 21 Code: c
Comment: ASL B is a screening level method. Provide justification for using data at this quality level to verify the removal of above-WAC material.

123) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: F.3.2.1 Pg #: F-15 Line #: 6 and 9 Code: c
Comment: ASL B data is used here to both to verify TCLP attainment and to verify FRL attainment. Please provide justification.

Design Criteria Package

Technical Specifications

124) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #: 01010 Pg. #: 1 Line # Code: C
Comment: Item 1.1.A.9 is misleading as it suggests that the AWWTF discharge line is the only utility to remain. The statement should be revised to indicate what other utilities will remain in place.

125) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #: 02050 Pg. #: 7 Line # Code: E
Comment:In Item 3.2.A.3, revise "...provide the located and..." to "provide the location and..."

126) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #: 02050 Pg. #: 7 Line # Code: C
Comment: The plus or minus two inch tolerance for excavation depths of six inches as given in Item 3.1.U should be lowered. The allowable error represents too great a proportion of the excavated depth.

127) Commenting Organization: Ohio EPA Commentor: OFFO
Section #: Tech Specs 02100 Pg #: 3 of 8 Line #: 1.5D Code: c
Comment: This Paragraph refers to a Dust Control Plan and implies that "Part 6" also contains information relevant to dust control measures. We can not find either of these references in the submittal package. Please provide Ohio EPA with two copies of each.

128) Commenting Organization: OEPA Commentor: OFFO
Section #: Tech Specs. 02100 Pg. 6 Line # 3.4A.3 Code: C
Comment: Ohio EPA assumes the referenced woodchip stockpile is the one located in the vicinity of the met tower. Please clarify. Additionally, Ohio EPA understood that FDF had assumed responsibility for turning the pile. Will the selected contractor be responsible for turning the entire pile or simple newly generated material at the pile?

129) Commenting Organization: OEPA Commentor: OFFO
Section #: Tech Specs. 02100 Pg. 6 Line # 3.4C Code: C
Comment: This and subsequent specifications should be revised to include stockpile marking and fencing requirements being developed under the Sitewide Excavation Plan.

130) Commenting Organization: OEPA Commentor: OFFO
Section #: Tech Specs. 02205 Pg. 1 Line # 1.1C Code: C
Comment: The text should be revised to be consistent with current plans regarding above WAC soil storage. Ohio EPA understands the OU1 pile will no longer be utilized since the storm water runoff from the pile is not controlled. It is necessary to store any additionally generated above WAC material in an area in which storm water is controlled and treated.

131) Commenting Organization: OEPA Commentor: OFFO
Section #: Tech Specs. 02205 Pg. 7 Line # 1.8D Code: C
Comment: Additional clarification should be provided regarding the use of lead contaminated

soils between 200 and 400 ppm as "borrow material for the OSDF". DOE must provide additional detail regarding the tracking mechanism to be used for these soils to ensure they are not to be used in an area of ecological impact.

132) Commenting Organization: OEPA Commentor: OFFO
Section #: Tech Specs. 02205 Pg. 7 Line # 1.7F Code: C
Comment: The section must be revised to be consistent with the final WAC Plan. All inaccessible metals must be treated as process related metals unless proven otherwise. If visual inspection of the interior of the pipe is not possible then it should be assumed to be process related.

133) Commenting Organization: OEPA Commentor: OFFO
Section #: Tech Specs. 02205 Pg. 7 Line # Code: C
Original Comment #
Comment: In Section 1.8G.2. containers do not have to be "in-tact" to be "special materials" for this work.

134) Commenting Organization: OEPA Commentor: OFFO
Section #: Tech Specs. 02205 Pg. 11 Line # 3.1L&O Code: C
Comment: The A2P1 IRDP specifications included a requirement for haul vehicles to be covered during operation. Ohio EPA believes this is an appropriate control measure which should be incorporated into these specifications.

135) Commenting Organization: OEPA Commentor: OFFO
Section #: Tech Specs. 02205 Pg.12 Line # N.2 Code: C
Comment: The WAC Plan addresses free liquid content limitations and should be referenced herein.

136) Commenting Organization: OEPA Commentor: OFFO
Section #: Tech Specs. 02205 Pg. 13 Line # U Code: C
Comment: Ohio EPA does not believe the excavation tolerances are sufficiently conservative for remediation and in particular of above WAC areas. It is unacceptable to conduct incomplete removal in above WAC areas. Additionally, a 30% less or more conservative removal during surface soil remediation does not seem appropriate. The tolerances should be revised to ensure complete removal of above WAC areas and to reduce the uncertainty of surface soil removal.

137) Commenting Organization: OEPA Commentor: OFFO
Section #: Tech Specs. 02206 Pg. 11 Line # J Code: C

Comment: The Compaction Requirement for the Sediment Basin and Tank Area should be increased to 95 percent Standard Proctor. These areas are being designed to contain contaminated liquids and thus should use conservative compaction requirement in order to obtain the best possible low permeability structure.

138) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #: 02210 Pg. #: 5 Line # Code: C
Original Comment #
Comment: In addition to friable PACM, Item 3.1.D.3 should be revised to include PACM that is considered potentially friable.

139) Commenting Organization: OEPA Commentor: OFFO
Section #: Tech Specs. 02211 Pg. 2 Line # 1.5 Code: C
Comment: The specification should be revised to state that all submittals described therein will be submitted to the EPAs for review and approval prior to the initiation of any work.

140) Commenting Organization: OEPA Commentor: OFFO
Section #: Tech Specs. 02211 Pg. 4 Line # 3.1 Code: C
Comment: The specification should be revised to ensure the treatability study proves that TCLP was passed as a result of treatment rather than dilution. This will require a mass balance calculation in addition to otherwise discussed data.

Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #: 02211 Pg. #:6 Line # Code: C
Comment: The remediation areas indicated in Item 3.2.A.1 are inconsistent with those given in Section 1.2.3.1 of the Implementation Plan. For example, the total remediation area indicated in Section 1.2.1.3 is "over 3.7 acres" compared to the 3.5 acres stated in this specification.

141) Commenting Organization: OEPA Commentor: OFFO
Section #: Tech Specs. 02212 Pg. Line # Code: C
Comment: The specification should be revised to be consistent with the WAC Plan as well as incorporate reference to the WAO and its functions during the proposed work.

142) Commenting Organization: OEPA Commentor: OFFO
Section #: Tech Specs. 02212 Pg. Attachment I Line # Code: C
Comment: This attachment does not appear to be consistent with the WAC Plan nor the form currently being used for waste placement in the OSDF. The form should be revised or additional justification provided.

143) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #: 02270 Pg. #:1 Line # Code: C
Comment: Revise Item 1.1.E from "Installation of Continuous Berm" to "Installation of Run-on control Continuous Berm" for consistency with the drawings.

144) Commenting Organization: OEPA Commentor: OFFO
Section #: Tech Specs. 02270 Pg. 9 Line # 3.4B Code: C
Comment: The section requires stabilization of stockpiles by crusting agent whereas the prior section provides an option of seeding or crusting agent dependent upon the season. Please clarify.

145) Commenting Organization: OEPA Commentor: OFFO
Section #: Tech Specs. 02268 Pg. Line # Code: C
Comment: The specification contains no requirement to dismantle/remove the remediation water transfer lines upon completion of the project. Ohio EPA recommends incorporation of removal of these lines to ensure certification can be completed in the area.

146) Commenting Organization: OEPA Commentor: OFFO
Section #: Tech Specs. 02850 Pg. Line # Code: C
Comment: Ohio EPA recommends the addition of ASTM standard D 4873-95 Standard Guide for Identification, Storage, and Handling of Geosynthetic Rolls.

147) Commenting Organization: OEPA Commentor: OFFO
Section #: Tech Specs. 02850 Pg. 14 Line # 3.1B Code: C
Comment: Additional detail should be provided regarding the requirements of the finish grade. Stating the "finish grade does not contain rocks" can be viewed as overly stringent or insufficiently conservative dependent upon the definition of a rock. Ohio EPA recommends use of finish grade specifications similar to that used in the OSDF construction.

148) Commenting Organization: OEPA Commentor: OFFO
Section #: Tech Specs. 02850 Pg. 23 Line # 3.2W Code: C
Comment: Additional detail should be provided regarding disposal of railroad ties and pressure treated lumber in the OSDF and how such disposal will be compliant with OSDF organic material requirements.

149) Commenting Organization: OEPA Commentor: OFFO
Section #: Tech Specs. 02900 Pg. 5 Line # 2.1G Code: C
Comment: It is unclear why "asphalt emulsion tackifier" is required in this specification whereas

in specification 02270.2.1.G "asphaltic type emulsions" are specifically prohibited. If it is inappropriate to use for a dust suppressant, it would seem equally unacceptable for seeding.

150) Commenting Organization: OEPA Commentor: OFFO
Section #: Tech Specs. 02900 Pg. 3 Line # Code: C
Comment: Ohio EPA believes the current seeding specification may negatively impact final restoration and should be revised. Ohio EPA proposes evaluating seeding/stabilization requirements based upon the duration the area will remain undisturbed. For areas that will be disturbed within a period of 2 years following seeding, Ohio EPA recommends use of a crusting agent for all soils going to the OSDF and for other areas use of temporary seeding (annual rye). For areas in which disturbance is not expected within 2 years, Ohio EPA recommends the use of native prairie grasses for revegetation and stabilization. Prairie grasses should be sown using a seed drill at a rate of 10 lbs/acre into a prepared bed and covered with blown straw mulch at a rate of 2 tons/acre. No fertilizer is recommended when planting these grasses. The grass mixture should include Canada Wild Rye, Little Bluestem, Big Bluestem, Indian Grass, Switch Grass, Side-Oats Grama; proposed ratio of 2:2:3:2:0.5:0.5, respectively. Use of native prairie grasses will hopefully support final restoration as well provide some temporary habitat to compensate for the large losses of habitat occurring during remediation. Ohio EPA hopes to work with DOE to optimize the seeding mixture and planting time over the course of site remediation, therefore to the extent practical contracts should allow flexibility in seeding mixture and planting time.

151) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #: 02999 Pg. #: General Line # Code: C
Comment: Pipe insulation is only referred to in the execution section (3.0). It should be included in the general and product sections; an insulation product should be specified.

152) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #: 03316 Pg. #: 1 Line # Code: E
Comment: In Item 1.1.D, revise "...electric duckbank..." to "...electric ductbank..."

153) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #: 03316 Pg. #: 4 Line # Code: E
Comment: Item 3.2.E.1 is missing text and currently does not make sense.

154) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #: 13205 Pg. #: General Line # Code: C
Comment: No tank height or outlet information is indicated. It is, therefore, unclear from the specifications and drawings how suction will be maintained by the pumps to remove water from

the tanks and how the direct transfer to tank trucks will be performed.

155) Commenting Organization: OEPA Commentor: HSI-GeoTrans, Inc.
Section #: 15060 Pg. #: 9 Line # Code: C
Comment: Section 02667 referenced in Item 3.4.A.4 does not exist and is indicated to be the source for the design pressure indicated in the table. In addition, the required information is also not available in Section 02668.

Construction Drawings

156) Commenting Organization: OEPA Commentor: OFFO
Section #: Drwg. G0005 Pg #: Line #: Code: C
Comment: Ohio EPA recommends DOE evaluate soils designated as "potentially wet soil conditions area" but located outside the lead contamination area as possible source soils for wetland projects on-site. These "wet areas" may contain soils and associated seed banks that would be beneficial to on-site wetland restoration projects. If it is believed these soils are below FRLs and BTVs the soil from these areas could be stockpiled separately and used to line proposed restoration wetland in the A1P1 sediment basin area.

157) Commenting Organization: OEPA Commentor: OFFO
Section #: Drwg. G0009 Pg #: Line #: Code: C
Comment: Ohio EPA does not concur with the proposed plan for regrading the sediment basins but recommends regrading the area to support wetlands. The area currently supports some wetland vegetation suggesting the viability of such an effort. Additionally, DOE has delayed implementation of wetland mitigation work in the Northern Woodlots emphasizing the need for near term work in other areas of the site. The IRDP should be revised to include incorporation of a small wetland system into the area previously occupied by the A1P1 sediment basins following certification of the area.

158) Commenting Organization: OEPA Commentor: OFFO
Section #: Drwg. G0009 Pg #: Line #: Code: C
Comment: This figure and others referencing areas altered by construction of the OSDF and North Entrance road should be revised to show as-built topography, structures and facilities. Use of up-to-date base maps is important to a bidding contractor as well as agency reviewers in understanding proposed work activities and their impact/coordination with existing features.

159) Commenting Organization: OEPA Commentor: OFFO
Section #: Drwg. G0011 Pg #: Line #: Code: C

Comment: The reviewer is unable to discern from the drawings the design of the A1P2 borrow area. Details including drainage, depth of excavation, slope, etc need to be included in the IRDP package.

160) Commenting Organization: OEPA Commentor: OFFO
Section #: Drwg. G0020&21 Pg #: Line #: Code: C
Comment: It may be beneficial to include CU boundaries on the "Initial" plate to show which areas will and won't be certified along with the changes in access control. This will clarify if the access controls relate to certified areas or not.

161) Commenting Organization: OEPA Commentor: OFFO
Section #: Drwg. G0023 Pg #: Line #: Code: C
Comment: Ohio EPA recommends re-evaluation of the use of railroad ties in the decon facility due to the contaminants which they may contribute to the decon water waste stream.