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MAR 31 2003

Mr. James A. Saric, Remedial Project Manager
United States Environmental Protection Agency
Region V, SR-6J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

DOE-0308-03

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

Dear Mr. Saric and Mr. Schneider:

**TRANSMITTAL OF RESPONSES TO COMMENTS AND THE REVISED INTEGRATED
REMEDIAL DESIGN PACKAGE FOR AREA 3B/4B/5**

- References:
1. Letter from J. Saric to J. Reising, "Area 3B/4B/5 IRDP," dated November 26, 2002
 2. Letter from T. Schneider to J. Reising, "Disapproval – IP for Area 3B/4B/5," dated November 26, 2002
 3. Letter DOE-0202-03, from J. Reising to J. Saric and T. Schneider, "Request for Extension of the Submittal Date for the Revised Integrated Remedial Design Package for Areas 3B, 4B, and 5," dated February 7, 2003
 4. Letter from J. Saric to J. Reising, "U.S. DOE Request for Extension of Area 3B, 4B, 5 IRDP," dated February 12, 2003

In accordance with the Sitewide Excavation Plan, enclosed for your approval are responses to the United States Environmental Protection Agency (USEPA) and Ohio Environmental Protection Agency (OEPA) comments and the revised Integrated Remedial Design Package (IRDP) for Area 3B/4B/5. This IRDP was revised to include the comment responses as noted in References 1 and 2, as well as the agreements reached during the January 29, 2003 Technical Information Exchange Meeting between USEPA, OEPA, and DOE. The

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MAR 31 2003

~~Mr. James A. Saric~~
Mr. Tom Schneider

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schedule for this resubmittal is consistent with the date requested and approved as noted in References 3 and 4 and was verbally approved by the OEPA during the Technical Information Exchange (TIE) meeting. The IRDP consists of the following documents:

- Implementation Plan for Area 3B/4B/5
- Technical Specifications
- Construction Drawings
- Reference Drawings and Specifications

If you have any questions or need further information, please contact Robert Janke at (513) 648-3124.

Sincerely,



Johnny W. Reising
Fernald Remedial Action
Project Manager

FCP:R.J. Janke

Enclosure: As Stated

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Mr. James A. Saric
Mr. Tom Schneider

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DOE-0308-03

cc w/enclosures:

R. Janke, OH/FCP
A. Murphy, OH/FCP
D. Pfister, OH/FCP
T. Schneider, OEPA-Dayton (three copies of enclosures)
G. Jablonowski, USEPA-V, SRF-5J
M. Cullerton, Tetra Tech
F. Bell, ATSDR
M. Shupe, HSI GeoTrans
R. Vandegrift, ODH
AR Coordinator, Fluor Fernald, Inc./MS78

cc w/o enclosures:

J. Reising, OH/FCP
R. Abitz, Fluor Fernald, Inc./MS64
T. Beasley, Fluor Fernald, Inc./MS60
B. Brucken, Fluor Fernald, Inc./MS65-2
D. Carr, Fluor Fernald, Inc./MS1
J. Chiou, Fluor Fernald, Inc./MS64
T. Hagen, Fluor Fernald, Inc./MS1
K. Harbin, Fluor Fernald, Inc./MS60
U. Kumthekar, Fluor Fernald, Inc./MS64
F. Miller, Fluor Fernald, Inc./MS64
R. Nichols, Fluor Fernald, Inc./MS1
D. Powell, Fluor Fernald, Inc./MS64
R. Reynolds, Fluor Fernald, Inc./MS64
D. Russell, Fluor Fernald, Inc./MS64
A. Snider, Fluor Fernald, Inc./MS64
T. Poff, Fluor Fernald, Inc./MS65-2
W. Zebick, Fluor Fernald, Inc./MS60
ECDC, Fluor Fernald, Inc./MS52-7

**RESPONSES TO U.S. ENVIRONMENTAL PROTECTION AGENCY
TECHNICAL REVIEW COMMENTS ON THE
DRAFT INTEGRATED REMEDIAL DESIGN PACKAGE FOR AREA 3B/4B/5
(20810-IRDP, 20810-PL-0004, REVISION A)**

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

GENERAL COMMENTS

Implementation Plan

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: All

Page #: Not Applicable (NA)

Line #: NA

Original General Comment #: 1

Comment: A contingency plan for addressing impacts along preferential migration pathways, such as utility trenches and building foundations, that are not scheduled to be removed should be included in the implementation plan. Drawings 99X-5500-G-00711, 99X-5500-G-00720, 99X-5500-G-00721, 99X-5500-G-00660 through 99X-5500-G-00664, 99X-5500-G-00675, 99X-5500-G-00678, and 99X-5500-G-00692 through 99X-5500-G-00694 show utility lines such as electrical ducts, raw water lines, storm sewers, and sanitary sewer lines and substructures such as foundation footings, hydraulic elevator rams, and wooden piers to be left in place below the design grade.

Response: The only structures planned to remain in place after remedial excavation are the piles under the Elevated Water Storage Tank (26B). Other structures shown below the design grade will be removed in accordance with drawing 99X-5500-G-00740 (D-3) "UTILITY REMOVAL DETAIL BELOW DESIGN GRADE", after the excavated surface is precertified. Subsequently, any associated pathways will be removed. Excavations within 5 feet of the GMA interface will have a clay plug installed in accordance with specification Section 02206.

Action: Drawing 99X-5500-G-00740 (D-3) "UTILITY REMOVAL DETAIL BELOW DESIGN GRADE" will be revised to more appropriately address structure removal below the design in addition to utility removal.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: All

Page #: NA

Line #: NA

Original General Comment #: 2

Comment: The method to be used for capping subsurface structures that are to remain in place should be described in the implementation plan. The plan indicates that foundation piles within the excavation will be capped with 2-foot diameter clay plugs but does not address other structures that will remain in place.

Response: The only structures planned to remain in place after remedial excavation are the piles under the Elevated Water Storage Tank (26B). These piles will be truncated and capped with 2-foot diameter clay plugs in accordance with specification Section 02206 as described in the implementation plan.

Action: None.

Commenting Organization: U.S. EPA

Section #: 2.0

Page #: NA

Commentor: Saric

Line #: NA

Original General Comment #: 3

Comment: Tables or graphs should be presented in the implementation plan that compare the analytical data used to determine above-waste acceptance criteria (WAC) areas to the WAC.

Response: Agree.

Action: This information will be provided as Table 2-7.

Commenting Organization: U.S. EPA

Section #: 2.6.3

Page #: 2-27 and Appendix E

Commentor: Saric

Line #: NA

Original General Comment #: 4

Comment: In Section 2.6.3, a slope 1:1 line represents the point where the excavation depth equals the final remediation level (FRL) exceedance depth. Consideration should be given to the statistical method used to determine the excavation depths based on the FRL exceedances. First, the analytical data should be tested to determine whether they can be represented by a normal distribution. Consideration should be given to the number of data points available. Generally, at least 15 to 20 data points are required to determine the distribution of a data set. If only a few data points are available, the data may be skewed, and an adjustment (log, exponential, etc.) may be necessary. Second, the data set should be plotted on an x-y axis to determine what type of regression would produce the lowest sample correlation coefficient. A 1:1 slope line may not be the best choice for the data set.

Response: There is an error in the referenced text that may have misled the reviewer. The text should be revised to read, "A line (slope 1:1) represents the point where the excavation depth equals the *sample depth*" (in place of "FRL exceedance depth"). The purpose of these graphs is to provide a simple visual reference to verify that all identified above-FRL material will be excavated (i.e., any points above the line represent a sample with an FRL exceedance at a depth greater than the planned excavation depth). For this type of evaluation, the distribution and correlation coefficient of the data is not of interest.

Action: The referenced text will be corrected.

Commenting Organization: U.S. EPA

Appendix #: D

Page #: NA

Commentor: Saric

Line #: NA

Original General Comment #: 5

Comment: This section should be revised to identify the model used to determine the excavation volumes, including the equations or software used. The revised text should also describe how the geostatistical model was used to estimate the excavation volumes.

Response: Details of the model construction are discussed in Appendix E of the Implementation Plan for Area 3B/4B/5.

Action: None.

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Drawings

Commenting Organization: U.S. EPA
Drawings #: Locations of Below Grade Structures
Original General Comment #: 6

Commentor: Saric
Line #: NA

Comment: A legend page should accompany the drawings depicting the locations and dimensions of foundations and utilities, which are referred as "S" and "P" drawings, respectively. The legend page should define all the abbreviations used in these drawings. The abbreviations observed in the foundation drawings include: L/P Trench, H/P Trench, B/FTG EL, COL PIER, T/SLAB, B/TRENCH, L.P. EL, H.P. EL, THK, AND T/FDN. Some of the utility drawing abbreviations include: AIP, CMP, C.O., T.O.G., FQ1-6-12"-L1, LCS, CG & E, 1 1/2"C WITH (1) 3/C #8 & 1 #10 G ELEC. DUCT 7" X 7", WW, MH#158 METER, ISQ, RES, IE, and VIT.

Response: Agree.

Action: The list of abbreviations on drawing 99X-5500-X-00639, Legend and General Notes, will be expanded to include those found on construction and technical reference drawings. In addition, a general note will be added to this drawing stating that utility designation abbreviations are in accordance with the master underground utility grid drawing, which contains the list of site designations for underground utilities.

SPECIFIC COMMENTS

Implementation Plan

Commenting Organization: U.S. EPA
Section #: 1.6
Original Specific Comment #: 1

Page #: 1-13

Commentor: Saric
Lines #: 43

Comment: The section should state that excavations will be backfilled with fill in accordance with Specification Section 02206.

Response: This section identifies actions to be taken to address relevant Operable Unit (OU) 3 and OU5 remedy components identified in the OU3 and OU5 RODs. The reference of a specific section of the technical specification or drawing is too specific for the purpose of this section. However, compaction of the backfill will be included.

Action: Text in the referenced section will be revised to read as follows:
"- Restore the site. Restoration of 3B/4B/5 will be conducted in a manner consistent with the NRRP, and will include select placement of compacted fill of the excavation, grading..."

Commenting Organization: U.S. EPA
Figure #: 1-2
Original Specific Comment #: 2

Page #: NA

Commentor: Saric
Line #: NA

Comment: A legend symbol for the Main Drainage Corridor area should be added to Figure 1-2.

Response: Agree.

Action: A legend symbol for the Main Drainage Corridor area will be added to Figure 1-2.

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Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 2.1.3

Page #: 2-2

Line #: 7 to 14

Original Specific Comment #: 3

Comment: Section 2.1.3 states that the preliminary remedial excavation boundaries were modeled against FRL exceedances using a three-dimensional computer model. The text should state what type of model was used to extrapolate the uranium data in order to determine excavation depths.

Response: A kriged 3D computer model of total uranium contamination was generated from soil sample data. Details of the model construction are discussed in Appendix E of the document.

Action: A reference to Appendix E will be added within the subject text.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 2.1.5

Page #: 2-3

Line #: 13 to 15

Original Specific Comment #: 4

Comment: Section 2.1.5 states that the surveyed footprints of the former underground storage tanks (UST) will be the starting points for sampling activities. Section 2 should also include a figure showing the locations of the former UST footprints or should cite a figure in a previously approved document showing the former UST locations.

Response: Agree.

Action: A figure showing the locations of former UST footprints in Areas 3B/4B/5 will be provided in Section 2.0 of the Implementation Plan.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 2.3.2

Page #: 2-10

Line #: 18 to 25

Original Specific Comment #: 5

Comment: Section 2.3.2 should state whether the technetium-99 WAC exceedances are unbound horizontally, vertically, or both. Also, the section should cite a document where analytical data can be found for borings Zone 1-273, PLANT1PAD-21D, and PLANT1PAD-86, or the data should be included in Appendix C.

Response: Information on the vertical and horizontal bounding of WAC exceedances is already provided in Section 2.6.2. With regard to the data from the referenced borings, this information is provided in the Project Specific Plan (PSP) for the Investigation of Known Exceedances of the OSDF WAC in Areas 3B/4B/5 and/or the PSP for Miscellaneous Areas WAC Investigation.

Action: A reference to Section 2.6.2 will be added to Section 2.3.2. Also, a reference to the appropriate PSP will be included in Section 2.3.2.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 2.3.2

Page #: 2-11

Line #: 8

Original Specific Comment #: 6

Comment: Section 2.3.2 should explain why technetium-99 and uranium concentrations were found to be above WAC in boring PLANT1PAD-86, but not in boring A3B-P1P-10, assuming that these borings are at the same location.

Response: It cannot be determined for certain why the technetium-99 concentrations were above WAC in RI/FS boring PLANT1PAD-86, but below the WAC in co-located predesign boring A3B-P1P-10. However, it is possible to speculate on a number of reasons for this, including: analytical variability, contaminant concentration variability among the two aliquots of soil, and the possibility that the contamination levels decreased over time (the samples were analyzed nearly 10 years apart, and technetium-99 is extremely mobile). Such a discussion would be speculative, and lies outside the scope of the Area 3B/4B/5 Implementation Plan.

Action: None.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 2.3.2

Page #: 2-11

Line #: 18 to 19

Original Specific Comment #: 7

Comment: Section 2.3.2 states that physical samples were collected from borings A6-23 through A6-35 and cite Figures 2-5 and C-1. Borings A6-34 and A6-35 are shown in Figure C-1 but not in Figure 2-5. Also, analytical data for these two borings are not included in Appendix C. These omissions in the plan should be corrected.

Response: Agree. These borings were inadvertently omitted from Figures 2-5 and C-1. These data were received just prior to submittal of the draft IRDP, and therefore, were not yet entered into the Sitewide Environmental Database (SED). Since data were pulled from SED to create Appendix C, these results were not yet available for inclusion in Appendix C.

Action: Borings A6-34 and A6-35 will be added to Figures 2-5 and C-1, and Appendix C.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 2.3.2

Page #: 2-12

Line #: 26 to 31

Original Specific Comment #: 8

Comment: Section 2.3.2 should cite a document where the analytical data for boring A4B-P8-09 can be found, or the data should be included in Appendix C.

Response: Many borings in Area 3B/4B/5 were collected in the month before submittal of the draft IRDP, and the analytical results were received only days before submittal. Therefore, these data were not yet entered into the SED. Since data were pulled from SED to create Appendix C, these results were not yet available for inclusion in Appendix C.

Action: The results for boring A4B-P8-09 will be added to Appendix C.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 2.3.2

Pages #: 2-14 and 2-15

Line #: NA

Original Specific Comment #: 9

Comment: Section 2.3.2 should cite Figures 2-6 and C-7, which show the boring locations.

Response: Agree.

Action: Section 2.3.2 will include a reference to the appropriate figures.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 2.3.2

Page #: 2-15

Line #: 1 to 4

Original Specific Comment #: 10

Comment: Figure 2-3 should show the footprint area previously excavated to construct the Health and Safety Building basement or the text should cite a previously submitted figure showing this area.

Response: Agree. The 1989 addition to the Health and Safety Building is shown on Figure 2-6 of the PSP for Investigation of Known Exceedances of the OSDF WAC in Areas 3B/4B/5.

Action: A reference to Figure 2-6 of the PSP for Investigation of Known Exceedances of the OSDF WAC in Areas 3B/4B/5 will be added to Section 2.3.2.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 2.3.2

Page #: 2-15

Line #: 11 to 20

Original Specific Comment #: 11

Comment: Section 2.3.2 should cite a document where the analytical soil data for borings A5-HSB-01 and A5-HSB-02 are presented, or this data should be included in Appendix C. Also, the section should cite Figure 2-6.

Response: With regard to boring A5-HSB-01, analytical results were received just prior to submittal of this IRDP. Refer to DOE's response to U.S. EPA Original Specific Comment No. 8. With regard to boring A5-HSB-02, this boring has not yet been collected due to active utilities in the area, as discussed in Section 2.3.2. Therefore, there are no data to report.

Action: Results for boring A5-HSB-01 will be provided in Appendix C.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 2.3.2

Pages #: 2-15 and 2-16

Line #: 30 to 32 and 1 to 3

Original Specific Comment #: 12

Comment: Borings are labeled as AT-1 through AT-10 in the text, but as A4B-AT-1 through A4B-AT-10 in Figure 2-5 and Appendix C. The boring labels in the text should be revised to match those used in the figure and Appendix C.

Response: The borings were called out as "AT-1 through AT-10" in the text because two of these borings (AT-8 and AT-9) were collected in Area 5, and thus were identified as A5-AT-8 and A5-AT-9. It therefore would be inaccurate to label them as A4B-AT-1 through A4B-AT-10. Please note that the figure does identify them as A4B-AT-1 through 7, A5-AT-8, A5-AT-9 and A5-AT-10.

Action: None.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 2.3.2

Page #: 2-16

Line #: 1 to 3

Original Specific Comment #: 13

Comment: Analytical data for boring A4B-AT-10 are not included in Appendix C as stated in Section 2.3.2. These data should be added to Appendix C.

Response: As discussed above, the correct Boring ID for the referenced boring is A5-AT-10. The data for this boring is included in Appendix C.

Action: None.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 2.3.3.1

Page #: 2-16

Line #: 16

Original Specific Comment #: 14

Comment: The word "is" should be changed to "if".

Response: Agree.

Action: The word "is" will be changed to "if".

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 2.3.3.2

Page #: 2-17

Line #: 5 to 11

Original Specific Comment #: 15

Comment: The paragraph should cite a figure or drawing which shows boring locations for A4B-FRL-1 through A4B-FRL-4. Also, analytical data for these borings should be included in Appendix C.

Response: A reference to Figure 2-8 (which shows the A4B-FRL borings) will be added to the referenced paragraph in Section 2.3.3.2. Analytical results from the A4B-FRL borings were received just prior to submittal of this IRDP. Refer to DOE's response to U.S. EPA Original Specific Comment No. 8.

Action: Figure 2-8 will be referenced in Section 2.3.3.2, and data from the A4B-FRL borings will be added to Appendix C.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 2.3.4

Page #: 2-18

Line #: 8

Original Specific Comment #: 16

Comment: The text should define "shine" and explain why it would occur on the Plant 1-pad.

Response: Shine is defined as an elevated background of high-energy gamma photons that arises when a measurement is performed near an above-grade radioactive source, such as the 55-gallon drums stored on the Plant 1 Pad. Shine is discussed further in Section 4.12 of the User Guidelines, Measurement Strategies, and Operational Factors for Deployment of *In Situ* Gamma Spectrometry at the Fernald Site (Revision B). Such a discussion lies beyond the scope of the Implementation Plan for Area 3B/4B/5.

Action: None.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 2.6.2

Page #: 2-23

Line #: 10 to 19

Original Specific Comment #: 17

Comment: Because the remedial investigation and feasibility study (RI/FS) sampling revealed above-WAC contamination from 0.5 to 1 foot below ground surface, the preliminary excavation depth should be established at 1 foot below ground surface.

Response: As stated in the referenced text, the RI/FS sampling showed above-WAC concentrations in the 0 to 0.5-foot interval, bound at the 0.5 to 1-foot interval by a below-WAC concentration of 228 mg/kg. Therefore, the depth of this above-WAC area is correctly defined at 0.5 feet.

Action: None.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 3.6.1.1

Page #: 3-15

Line #: 36

Original Specific Comment #: 18

Comment: The text should cite Drawing 99X-5500-G-00650 rather than Drawing 99X-5500-G-00649.

Response: Under the revised drawing package the correct drawing reference is 99X-5500-G-00657, Excavation/Drainage Plan (CW).

Action: The drawing reference will be corrected as noted in the response.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 4.2.2

Page #: 4-3

Line #: NA

Original Specific Comment #: 19

Comment: This section should be revised to limit the types of dust suppression agents used to those that do not contain any petroleum products, lignosulfate, or chloride products.

Response: Agree.

Action: The following sentence will be added to the end of the referenced section:

“Dust suppression agents shall not include petroleum products, lignosulfates, or chloride products.”

Commenting Organization: U.S. EPA

Commentor: Saric

Table #: 6-3

Page #: 6-25

Line #: NA

Original Specific Comment #: 20

Comment: The data displayed in Table 6-3 should instead be displayed using a timeline software product such as MS Project.

Response: Agree.

Action: A remediation and certification schedule has been provided as suggested in Table 6-3.

Commenting Organization: U.S. EPA

Commentor: Saric

Appendix #: B

Page #: NA

Line #: NA

Original Specific Comment #: 21

Comment: The curve number (CN) presented should be revised to better represent existing conditions in Areas 3B/4B/5. This area is mostly covered by pavement and concrete foundations. The CN should also be adjusted for Antecedent Soil Moisture Condition (AMC) III, which represents wet conditions. Such adjustments would increase the accumulated runoff (Q) and the total volume of runoff. If the estimate for the total volume of runoff is increased, the pumping rate in Basins 4B1 and 4B2 will have to be increased as well.

Response: The surface water calculations included in Appendix B represent the worse case (nearing the end of the excavation) at which time there will be no established ground cover and all surface pads and concrete are removed. During initial excavation, the site's storm sewer system will remain active. Areas yet undisturbed (pads, roads, grass or graveled covered areas will drain into the existing active storm sewer system. Even when at-grade concrete and asphalt is demolished, some areas will contain to drain into the storm sewer system (modify to reduce sediments into the system). Inherently as the excavation proceeds downward, surface water will no long drain into the existing storm sewer catch basins. The condition addressed in Appendix B represent the point in the excavation when surface water is no longer draining into the storm sewer system but is being collected and lifted for appropriate AWWT treatment. As such, the curve number (CN) used in the calculations is appropriate.

Action: None.

Commenting Organization: U.S. EPA

Commentor: Saric

Appendix #: B

Page #: B1

Line #: NA

Original Specific Comment #: 22

Comment: A legend, scale, and north arrow should be added to the figure.

Response: Agree.

Action: A legend, scale, and north arrow will be added to the figure

Commenting Organization: U.S. EPA

Commentor: Saric

Appendix #: C

Page #: NA

Line #: NA

Original Specific Comment #: 23

Comment: Missing analytical data for soil borings should be added to Appendix C. See Specific Comments 5, 7, 8, 11, 13, and 15.

Response: The above-WAC data for the borings identified in Specific Comment No. 5 have been included in Table 2-7. The data for the borings identified in Specific Comment Nos. 7, 8, 11, 13, and 15 have been incorporated into Appendix C.

Action: None.

Commenting Organization: U.S. EPA

Commentor: Saric

Appendix #: C

Page #: C-5

Line #: NA

Original Specific Comment #: 24

Comment: The former sump and piping locations are discussed in the text but are not shown in Figure C-5. This figure should be revised to show these locations.

Response: Agree.

Action: The revised figure will be incorporated.

Commenting Organization: U.S. EPA

Commentor: Saric

Appendix #: D

Page #: D-2

Line #: NA

Original Specific Comment #: 25

Comment: A table showing how the Gross Volume was calculated should be added to Appendix D. The table should include the equations and variables used. The table may consist of the input and output tables from the software package used to calculate the Gross Volume.

Response: The Gross Volume for each remediation area is calculated by triangulation using computer software to compare existing grade versus final design grade. A comparison of existing grade versus contamination grade is conducted to distinguish between impacted and non-impacted excavation. The tabulated gross volumes presented in Appendix D are a direct product of these triangulation exercises.

Action: Appendix D Introduction will be revised to elaborate on how excavation quantities were calculated.

Commenting Organization: U.S. EPA

Commentor: Saric

Appendix #: D

Page #: D-2

Line #: NA

Original Specific Comment #: 26

Comment: A table showing how the above-WAC soil volume was calculated should be added to Appendix D. The table may consist of the input and output tables from the software package used to calculate the soil volumes.

Response: Tables D-2 and D-3 summarize coordinates and depths of above-WAC areas used to hand-calculate above-WAC material quantities resulting from straight-walled excavation of these areas in accordance with specification Section 02205 and the construction drawings.

Action: None.

Commenting Organization: U.S. EPA

Commentor: Saric

Appendix #: E

Page #: E.7

Line #: NA

Original Specific Comment #: 27

Comment: A legend, scale, and north arrow should be added to Figure E.7.

Response: Agree.

Action: A legend, scale, and north arrow will be added to Figure E.7.

Commenting Organization: U.S. EPA

Commentor: Saric

Appendix #: G.1.1

Page #: G-2

Line #: 21 to 31

Original Specific Comment #: 28

Comment: The Conceptual Cross-Section should address a worst-case scenario in which some or all of the coarse-grained lenses and channels are continuous and how this scenario might affect the excavation volume estimates.

Response: The original intent of Figure G-4 was to show the locations and extent of deposits at or near the brown/gray glacial overburden interface within the FPA. However, the location of coarse-grained deposits was inadvertently omitted from the draft IRDP submittal. The figure has since been revised and is now designated as Figure G-5, Location of Extent of Interpreted Deposits At or Below the Brown/Gray Glacial Overburden Interface. Figure G-5 clearly shows that many of the coarse-grain deposits within Areas 3B and 4B are continuous. It has already been assumed during design that these coarse-grained deposits are continuous as shown on Figure G-5.

Action: None.

Commenting Organization: U.S. EPA

Commentor: Saric

Appendix #: G.1.2

Page #: G-3

Line #: 16

Original Specific Comment #: 29

Comment: Figure G-4 does not depict ancient, "muddy" streams as the text indicates. The text should cite the correct figure, or the "muddy" streams should be added to Figure G-4.

Response: Agree.

Action: Interpreted lacustrine and muddy stream deposits will be shown on Figure G-4.

Commenting Organization: U.S. EPA

Commentor: Saric

Appendix #: G.2

Page #: G-3

Line #: 30

Original Specific Comment #: 30

Comment: Figure G-6 is not included in Appendix G as the text indicates. The figure should be added to Appendix G, or the correct figure should be cited in the text.

Response: Agree.

Action: Figure G-6 will be added to document.

Commenting Organization: U.S. EPA

Commentor: Saric

Appendix #: G.2

Page #: G-4

Line #: 22

Original Specific Comment #: 31

Comment: Figure G-4 does not depict the muddy stream deposits as the text indicates. Either the figure or the text should be revised to correct this discrepancy.

Response: Agree.

Action: Interpreted lacustrine and muddy stream deposits will be shown on Figure G-4.

Commenting Organization: U.S. EPA

Commentor: Saric

Appendix #: G.2.1

Pages #: G-4 and G-5

Line #: NA

Original Specific Comment #: 32

Comment: The descriptions of the muddy stream deposits and lacustrine deposits should be improved by adding typical soil colors previously observed.

Response: Colors of the muddy stream deposits and lacustrine deposits are related to the color of till (gray or brown) see the brown/gray interface lines on cross-section figures.

Action: No action.

Commenting Organization: U.S. EPA

Commentor: Saric

Appendix #: G

Page #: NA

Line #: NA

Original Specific Comment #: 33

Comment: Cross-sections D-D' and E-E' are shown in Figure G-4 but are not included in Appendix G. Either these cross-sections should be removed from Figure G-4 or they should be added to Appendix G.

Response: Agree.

Action: Cross-sections for D-D' and E-E' will be added to Appendix G.

Drawings

Commenting Organization: U.S. EPA

Commentor: Saric

Drawing #: 99X-5500-G-00700

Section #: G-56

Original Specific Comment #: 34

Comment: Note 4 states that above-WAC areas will be excavated so as to leave vertical sidewalls. Consideration should be given to slope stability issues and the general feasibility of leaving vertical sidewalls given the soil types present.

Response: Above-WAC areas will be excavated so that vertical sidewalls remain temporarily after each 3-ft +/- 1-ft lift. Sidewalls will then be excavated to 2H:1V side slopes and the material will be stockpiled for sampling and/or real-time monitoring to determine disposition.

Action: None.

Commenting Organization: U.S. EPA

Commentor: Saric

Drawing #: 99X-5500-G-00711

Section #: G-57

Original Specific Comment #: 35

Comment: Section A should be revised to show the soil lithology.

Response: Agree.

Action: Soil lithology will be added to the drawing.

99048A

Commenting Organization: U.S. EPA
Drawing #: 99X-5500-G-00704
Original Specific Comment #: 36

Commentor: Saric
Section #: G-62

Comment: The excavation sumps should be assigned a different symbol, as it is difficult to differentiate them from drainage contours.

Response: Agree.

Action: A unique symbol will be used for the excavation sumps to distinguish them from contours.

Commenting Organization: U.S. EPA
Drawing #: 99X-5500-G-00739
Original Specific Comment #: 37

Commentor: Saric
Section #: D-2

Comment: Where compaction of earthen fill is addressed, as in the temporary diversion detail, standard or modified Proctor specifications should be cited.

Response: Compaction to standard or modified Proctor specifications is not necessary for all compacted fill. As in the case of temporary diversion berms, backfill in 12-inch loose lifts compacted by four passes of compaction equipment is sufficient.

Action: None.

Commenting Organization: U.S. EPA
Drawing #: 99X-5500-G-00680
Original Specific Comment #: 38

Commentor: Saric
Section #: N-1

Comment: General Note 1 cites drawing ??-????-?-????? and should cite the correct drawing.

Response: The drawing reference was a placeholder for a reference that is no longer needed.

Action: The drawing reference will be deleted.

Commenting Organization: U.S. EPA
Drawing #: 99X-5500-G-00639
Original Specific Comment #: 39

Commentor: Saric
Section #: X-3

Comment: The following abbreviations should be added to the legend and general notes: WW, UG, LW, UCW, LI, and MTL.

Response: See response to Original General Comment No. 6.

Action: See prescribed action for Original General Comment No. 6.

Commenting Organization: U.S. EPA
Drawing #: 99X-5500-G-00645
Original Specific Comment #: 40

Commentor: Saric
Section #: G-3

Comment: Direction arrows should be added to the drawing in order to show the directions of traffic flow at the site.

Response: Traffic routes shown represent 2-way traffic.

Action: Arrows will be added to traffic routes that are one-way (if applicable).

Commenting Organization: U.S. EPA

Commentor: Saric

Drawing #: 99X-5500-G-00662

Section #: G-21

Original Specific Comment #: 41

Comment: If the utility lines shown above the ground are supported on poles or stanchions, the embedment depths of the support structures should be shown.

Response: General note # 3 or 4 (depending on drawing) on the cross section drawings states the following: "Elevations have not been determined for utilities shown above existing grade." These utilities are actually below-grade but elevations could not be determined from the site's underground utility drawings.

Action: None.

Commenting Organization: U.S. EPA

Commentor: Saric

Drawing #: 99X-5500-G-00662

Section #: G-21

Original Specific Comment #: 42

Comment: Drawing 99X-5500-G-00653 shows a cross-section referenced to drawing 99X-5500-G-00662, but this drawing does not reference drawing 99X-5500-G-00653. This discrepancy should be resolved.

Response: Agree.

Action: References will be made to drawings 99X-5500-G-00653, 99X-5500-G-00676, and 99X-5500-G-00672.

Commenting Organization: U.S. EPA

Commentor: Saric

Drawing #: 99X-5500-G-00662

Section #: G-21

Original Specific Comment #: 43

Comment: The proposed slope of the excavation should be reconsidered based on the soil type present and Occupational Safety and Health Administration (OSHA) regulations.

Response: There is a vertical exaggeration on the drawing. The horizontal and vertical scales are not the same (1" = 30' Horizontal and 1" = 6' Vertical). Design grades that appears to be cut at a 1 Horizontal to 1 Vertical slope are actually at a 5 Horizontal to 1 Vertical slope. Throughout the 3B/4B/5 design the steepest grade shown on the design grade is 2 Horizontal to 1 Vertical slope. Excavation will be performed in compliance with Occupational Safety and Health Administration (OSHA) regulations.

Action: None.

Commenting Organization: U.S. EPA

Commentor: Saric

Drawing #: 99X-5500-G-00664

Section #: G-23

Original Specific Comment #: 44

Comment: The drawing and associated implementation plan text should address the possibility that the hydraulic ram of the elevator may be a preferential migration pathway for contaminants.

Response: The hydraulic ram will be removed and a clay plug will be installed over the Great Miami Aquifer (GMA) breach.

Action: An excavation line will be added to drawing 99X-5500-G-00664 and a note detailing ram removal and clay plug placement requirements will be included on drawing 99X-5500-G-00659, "Excavation/Drainage Plan (SE)."

Commenting Organization: U.S. EPA

Commentor: Saric

Drawing #: 99X-5500-G-00675

Section #: G-24

Original Specific Comment #: 45

Comment: The wooden piers supporting Building 2C should be inspected to determine whether they provide a preferential migration pathway for contaminants.

Response: The wooden piers will be removed and a clay plug will be installed over the GMA breach.

Action: An excavation line will be added to drawing 99X-5500-G-00675 and a note detailing pier removal and clay plug placement requirements will be included on drawing 99X-5500-G-00656, "Excavation/Drainage Plan (SE)."

Technical Specifications

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 02215

Page #: 5

Line #: NA

Original Specific Comment #: 46

Comment: Article 3.03.B.5 states that pipe embedment fill should be compacted with a minimum of four passes by a walk-behind compactor. The text regarding the minimum compaction of embedment fill should cite standard or modified Proctor specifications.

Response: See response to Original Specific Comment No. 37.

Action: See prescribed action for Original Specific Comment No. 37.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 02205

Page #: 10

Line #: NA

Original Specific Comment #: 47

Comment: Article 3.7.H should include a procedure for determining whether soil is petroleum-impacted by means of on-site screening. This screening could be performed using a photoionization detector, flame ionization detector, or mobile laboratory.

Response: Screening of suspect petroleum-contaminated soil is performed using a photoionization detector. This screening is considered internal protocol independent of design requirements, and is therefore excluded from technical specifications.

Action: None.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 02206

Page #: 5

Line #: NA

Original Specific Comment #: 48

Comment: Article 3.2.D.3 should cite standard or modified Proctor compaction specifications.

Response: See response to Original Specific Comment No. 37.

Action: See prescribed action for Original Specific Comment No. 37.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 02207

Page #: 4

Line #: NA

Original Specific Comment #: 49

Comment: In Article 3.2.H, the term "Construction Traveler(s)" should be defined.

Response: Reference to the applicable Construction Traveler package will be added to the Reference section, Article 1.3. However, it should not be necessary to define the term, which is common to the site.

Action: None.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 16370

Page #: 4

Line #: NA

Original Specific Comment #: 50

Comment: Article 3.2.C should state what type of preservative is to be applied to the shortened end of the pole. The preservative should be applied in accordance with American Wood-Preservers' Association (AWPA) Standard number C4-99 titled Poles-Preservative Treatment by Pressure Processes, as specified in Section 2.1 Table A-4 on Page 3 of 6.

Response: Material and application requirements for pole preservative are stated in Article 2.1.A.

Action: None.

**RESPONSE TO OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENT
ON THE DRAFT INTEGRATED REMEDIAL DESIGN PACKAGE FOR AREA 3B/4B/5
(20810-IRDP, 20810-PL-0004, REVISION A)**

FERNALD CLOSURE PROJECT

IMPLEMENTATION PLAN

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

Comment: As stated in the SEP, "Each IRDP will be submitted following *completion* of area-specific pre-excavation investigation and initial design activities." Predesign bounding sampling in this area is not completed. Nine out of fourteen *known* above-WAC areas are not presently bounded. Several other areas have been sampled, but the data was not received and incorporated into this document prior to submittal. While Ohio EPA understands that many of these areas are currently inaccessible, it would not be productive to comment on an excavation design with so many data gaps. Ohio EPA expects DOE to complete the predesign investigation before submitting an IRDP document.

Response: It is the intent of DOE to delineate any above-WAC areas in such a manner as to minimize the volume of material that cannot be sent to the OSDF. At the time of this IRDP submittal, all of the sampling required to establish these minimal boundaries could not be performed. Therefore, the design demonstrated expected boundaries. However, there were available RI/FS data in many cases to conservatively bound the known above-WAC areas, but these were not used as bounding points. Since the original submittal, the majority of the necessary predesign sampling has been completed. These predesign borings, coupled with RI/FS borings, completely bound all but two of the sixteen known above-WAC areas. The two remaining areas are bound by physical structures that limit mobility of the contaminant.

Action: None.

RESPONSES TO INFORMAL OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENTS ON THE DRAFT INTEGRATED REMEDIAL DESIGN PACKAGE FOR AREA 3B/4B/5 (20810-IRDP, 20810-PL-0004, REVISION A)

FERNALD CLOSURE PROJECT

IMPLEMENTATION PLAN

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

Comment: Due to the ambiguous nature of the implementation plan, DOE should prepare a post-excavation report at the end of 3B/4B/5 area excavation. This report should document the "as-built" contours, FRL and WAC confirmation sampling results in the excavated areas, remaining known above-FRL conditions, as well as scopes of the future phases of soil remediation to be performed in the 3B/4B/5, OSDF, and/or all areas mentioned in this document where portions or sections have been left to be cleaned up at a later date.

Response: This IRDP has been revised to include the complete excavation of Impacted Materials in the southern portion of Area 4B as well as all areas governed by the Area 3B/4B/5 IRDP. Final grading and vegetation will be performed in accordance with the NRRP. A plan for final restoration grading of Areas 3B and 4B will be issued to the agency nearing the end of the remedial excavation for Areas 3B and 4B. The grading for final restoration for Area 5 is included in the drawing package.

Action: Add the submittal schedule for the plan for final restoration grading of Areas 3B and 4B to Section 6.

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

Comment: This document is quite confusing particularly with regard to what is located within or outside of 3B/4B/5. A map is essential to understanding the scope of work included in this document and what's actually being "excluded." Additionally, it seems prudent that all the areas to be "excluded" be removed from the document and submitted separately at a later date following appropriate characterization.

Response: Portions of the remedial area boundaries have been modified to closer match the excavation scope presented in this IRDP. Most of the areas previously excluded in Section 1.1 have been reapportioned to either Area 6 or Area 7 and will be addressed later in the respective IRDP. The only exclusion required is for the OSDF Basin.

Action: Figure 1-1 will be modified to show the new remedial area boundaries and addition figures will be added to Section 1 that show each of the remediation areas in greater detail (3B, 4B, 5, and MDC, respectively)

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 1.1

Pg. #: 1-2

Line #: 13-14

Code: C

Original Comment #: 3

Comment: Areas that are being excluded within Area 5 or any other area should not be addressed by an addendum, especially as an addendum to an IRDP. These areas should have been characterized prior to the IRDP through the PSP investigation process.

Response: Portions of the Areas 5, 6, and 7 boundaries have been modified to closer match the excavation scope presented in this IRDP. Most of the areas previously excluded in Section 1.1 have been reapportioned to either Area 6 or Area 7 and will be addressed later in the respective IRDP. The only exclusion required is for the OSDF Basin. The OSDF basin has already obtain certification as part of Area 5 and will be excluded from this document since no additional remediation activity is required [see Project Specific Plan for Predesign Investigation in Area 5 (20810-PSP-0005) and Certification Report Eastern Field (20820-RP-0001)].

Action: Section 1.1 will be rewritten to reflect the modified Remedial Area boundaries and figures will be added to Section 1.0 that adequately show the boundary changes.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 1.2.1 and 1.2.2

Pg. #: 1-3

Line #:

Code: C

Original Comment #: 4

Comment: According to these sections, 3B comprises 20 acres, but the excavation area for 3B will be increased to 23 acres due to the inclusion of a utility trench in the northern section of 4B. 4B comprises 28 acres, but the excavation area will only be 23 acres due to the utility trench in the north, which expands the 3B excavation. The math on these two sections does not add up: 4B loses 5 acres due to the trench, but 3B only gains 3 acres due to the trench. Where are the missing 2 acres? Please explain.

Response: Agree. Text is confusing.

Action: Text in Section 1.2 has been simplified to report acreage per remediation area (3B/4B/5) and the acreage of the MDC based on revised boundaries.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 1.2

Pg. #: 1-3 - 1-4

Line #:

Code: C

Original Comment #: 5

Comment: Each individual section discussed in Section 1.2 needs to have a detailed map showing the specific areas discussed i.e., boundaries, the utility trench location in Area 3B, Plant 1 Pad location, SSOD location, etc.

Response: Agree.

Action: Figures will be included with Section 1.0 detailing each remediation area address under this IRDP.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 1.4.2

Pg. #: 1-7

Line #: 6-7

Code: C

Original Comment #: 6

Comment: This section states that the CFC package will be done before the end of the 2002 calendar year. How will the CFC package be done by the end of 2002 when numerous areas are not even characterized to bound excavations?

Response: The referenced text was incorrect.

Action: The first sentence in Section 1.4.2 will be rewritten to remove the reference to the completion data, as follows:

“The RD began in February 2002 and will continue through completion of the Certified-for-Construction (CFC) Package.”

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 1.4.2

Pg. #: 1-7

Line #: 38-39

Code: C

Original Comment #: 7

Comment: The impacted material in the southern portion of Area 4B should not be excluded from this IRDP or addressed later in a DCN. Especially, **not** through another area's IRDP. The impacted material in 4B should have been characterized prior to this IRDP through the PSP investigation process. It is unacceptable to plan for DCNs.

Response: This IRDP has been revised to include the complete excavation of Impacted Materials in the southern portion of Area 4B.

Action: The drawings and Implementation Plan will be modified accordingly.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 2.1.3

Pg. #: 2-8

Line #: 14-15

Code: C

Original Comment #: 8

Comment: This sentence is incomplete. Please clarify.

Response: Agree.

Action: The section will be rewritten to incorporate all newly generated data.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 2.1.4

Pg. #: 2-2

Line #: 23-32

Code: C

Original Comment #: 9

Comment: For clarification purposes, a map should be included showing the 9 HWMUs exact location in 3B/4B/5 and referenced along with Table 2-4.

Response: Agree.

Action: Add a map identifying the locations of the HWMUs in 3B/4B/5.

Commenting Organization: Ohio EPA Commentator: OFFO
 Section #: 2.1.5 Pg. #: 2-3 Line #: Code: C
 Original Comment #: 10

Comment: For clarification, will the UST's be removed along with the contamination and will these areas will be sampled again during certification?

Response: All UST footprints will be sampled to confirm the constituents formerly stored in the UST meet their respective FRLs during certification.

Action: This section will be rewritten to clarify that sampling will occur only during certification.

Commenting Organization: Ohio EPA Commentator: OFFO
 Section #: 2.3.2 Pg. #: 2-11 Line #: 12-14 Code: C
 Original Comment #: 11

Comment: Why wasn't the contamination to the north of Plant 1 Pad bound prior to this IRDP?

Response: All above-WAC area on or around Plant 1 Pad are now completely bound.

Action: None.

Commenting Organization: Ohio EPA Commentator: OFFO
 Section #: 2.3.3.2 Pg. #: 2-17 Line #: 21-23 Code: C
 Original Comment #: 12

Comment: When will this substation be deactivated? Through what document will this sampling be completed and documented?

Response: The substation is no longer part of the scope of this IRDP.

Action: Section 2.3.3.2 will be revised to state that the substation is no longer part of Area 5.

Commenting Organization: Ohio EPA Commentator: OFFO
 Section #: 2.6.3 Pg. #: 2-27 Line #: 27-34 Code: C
 Original Comment #: 13

Comment: Ohio EPA does not find it acceptable to leave an area of known contamination within an excavation and designating it to be removed as part of another area in the future. 4B will not be able to be certified until the known contamination is removed.

Response: This IRDP has been revised to include the complete excavation of Impacted Materials in the southern portion of Area 4B.

Action: The drawings and Implementation Plan will be modified accordingly.

Commenting Organization: Ohio EPA Commentator: OFFO
 Section #: 2.6.3 Pg. #: 2-28 Line #: First bullet Code: C
 Original Comment #: 14

Comment: This paragraph is unclear. Will this thorium-232 exceedance be captured by the excavation or not?

Response: Agree the text is unclear. This thorium-232 FRL exceedance will be captured by the excavation.

Action: Section 2.6.3 will be revised to describe the points which will not be captured during excavation.

Commenting Organization: Ohio EPA Commentator: OFFO
Section #: 2.6.3 Pg. #: 2-28 Line #: Second bullet Code: C
Original Comment #: 15

Comment: If the deepest three thorium results are suspect, then the only way it is acceptable to not capture these contamination points in the excavation would be to resample the points. Otherwise, these three points will need to be captured as part of the excavation. It is unacceptable to rely on real-time monitoring to act as another round of sampling – real time is for finding unknown pockets of contamination, not verification.

Response: Agree. The suspect location and depths were resampled, and analyzed for thorium-232 to determine if the excavation needs to be extended to capture these suspect FRL Exceedances. The results demonstrated that thorium-232 is not present in the area.

Action: None.

Commenting Organization: Ohio EPA Commentator: DSW
Section #: 3.2 Pg. #: 3-3 Line #: 17-23 Code: C
Original Comment #: 16

Comment: These statements appear to conflict with those in Section 3.7.1, where all excavation water will be screened for VOCs prior to determining disposition. Based on those results, water will be routed to either the SWRB (Phase I of the AWWT) or the BSL (Phase II of the AWWT).

Response: Agree. Text in Sections 3.2 and 3.7.1 appear to contradict.

Action: To avoid confusion, text in Section 3.7.1 will be revised to direct the reader back to Section 3.2, where summarized dewatering requirements will be presented. Requirements will state that all excavation water will be screened against AWWT VOC acceptance criteria prior to discharging to either the SWRB or BSL.

Commenting Organization: Ohio EPA Commentator: DSW
Section #: 3.2, Appendix B Pg. #: NA Line #: NA Code: C
Original Comment #: 17

Comment: I can't find anything to indicate that steps will be taken to prevent runoff of surface water from outside the excavation entering the excavation. Will some steps be taken to prevent runoff from entering the excavation?

Response: Yes. Steps be taken to prevent runoff from entering the excavation.

Action: Text in Section 3.2 will be revised to address requirements for installation of a diversion berm on the centerline of backfilled isolation trenches, as well as general grading at excavation limits to direct surface water away from the excavation.

Commenting Organization: Ohio EPA

Commentator: DSW

Section #: 4.3

Pg. #: 4-7

Line #: 23-24

Code: C

Original Comment #: 18

Comment: The disposition of the water will depend on sample results as described in Section 3.7.1; it will not all be discharged to the SWRB as indicated in this section.

Response: Agree.

Action: The last sentence in the second paragraph of Section 4.3 will be revised to read as follows:

“Once soil remediation activities begin in Area 3B/4B/5, surface water runoff and perched groundwater that seeps into the excavation will be managed in accordance with Section 3.0 for subsequent AWWT treatment.”

Commenting Organization: Ohio EPA

Commentator: DSW

Section #: General

Pg. #: NA

Line #: NA

Code: C

Original Comment #: 19

Comment: Several drawing notes refer to SPR 3-5 (e.g. 99X-5500-G-00659 and 689, note 8) but SPR 3-5 could not be located. Also see comment regarding inlet protection.

Response: SPR 3-5, “Barricades” is a site safety requirements document that governs the barricading of potential fall hazards, such as exposed catch basins and manholes.

Action: Drawing notes will be revised to clarify the SPR 3-5 reference as pertaining to barricading for safety.

Commenting Organization: Ohio EPA

Commentator: DSW

Section #: Drawing 99X-5500-G-00738

Pg. #: NA

Line #: Inlet Protection

Code: C

Original Comment #: 20

Comment: Inlet protection does not conform to ODNR Rainwater and Land Development specifications.

Response: Inlet protection of catch basins will be modified to use a combination of bags filled with stone and filter fabric, in accordance with inlet protection as shown in the OEPA approved design for the Solid Waste Landfill and the Fire Training Facility. Straw bales will not be used.

Action: Inlet protection detail will be modified as stated in the response.

Commenting Organization: Ohio EPA

Commentator: DSW

Section #: Drawings

Pg. #: NA

Line #: NA

Code: C

Original Comment #: 21

Comment: Some of the drawings refer to draining to the open end of the sewer in the excavation. What is to prevent water from entering the excavation via this route and what protections are to be installed (such as inlet protection on catch basins) to prevent sediment from entering the sewer via this route?

Response: Discharge of excavation surface water directly into the storm sewer is only to occur during the later stages of the Former Production Area excavation. As such, most of the storm sewer system will have been removed during the Areas 3A, 4A, 3B, and 4B excavations. The sewer lines that remain will be oversized due to the decreased stormwater loading. The main storm sewer trunk located just north of the Storm Water Retention Basins is 60-inches

in diameter and will be oversized for the discharges from portions of Area 5, portions of Area 6, portions of Area 7, and the Main Drainage Corridor during the later stages of excavation. In addition, the Storm Water Retention Basin will also have a greatly reduced stormwater loading as compared to the design capacity. During the later stages of excavation, the Storm Water Retention Basin will be the infrastructure used to remove sediment from stormwater. During the excavation of MDC, the excavation is primarily being performed to remove the main storm sewer line. It does not appear prudent to put efforts into reducing the sediment loading entering the main storm sewer line as it is being removed from service. Excavation waters collected in MDC will have no other place to drain but into the yet to be excavated portions of the storm sewer.

Action: None.