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NOV 21 2002

Mr. James A. Saric, Remedial Project Manager
United States Environmental Protection Agency
Region V-SRF-5J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

DOE-0107-03

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 ON THE DRAFT INTEGRATED REMEDIAL DESIGN PACKAGE FOR THE SOLID WASTE LANDFILL AND THE FIRE TRAINING FACILITY

In accordance with the Sitewide Excavation Plan, enclosed for your review are responses to the United States Environmental Protection Agency (USEPA) and Ohio Environmental Protection Agency (OEPA) comments on the draft Integrated Remedial Design Package for the Solid Waste Landfill and the Fire Training Facility.

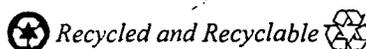
If you have any questions or need further information, please contact Robert Janke at (513) 648-3124.

Sincerely,

Johnny W. Reising
Fernald Remedial Action
Project Manager

FEMP:R.J. Janke

Enclosure: As Stated



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NOV 21 2002

DOE-0107-03

Mr. James A. Saric
Mr. Tom Schneider

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cc w/enclosure:

R. J. Janke, OH/FEMP
A. Murphy, OH/FEMP
D. Pfister, OH/FEMP
T. Schneider, OEPA-Dayton (three copies of enclosure)
G. Jablonowski, USEPA-V, SRF-5J
F. Bell, ATSDR
M. Cullerton, Tetra Tech
M. Shupe, HSI GeoTrans
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R. Greenberg, EM-31/CLOV
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D. Carr, Fluor Fernald, Inc./MS2
J. D. Chiou, Fluor Fernald, Inc./MS64
T. Hagen, Fluor Fernald, Inc./MS9
K. Harbin, Fluor Fernald, Inc./MS64
F. Miller, Fluor Fernald, Inc./MS64
T. Poff, Fluor Fernald, Inc./MS65-2
D. Russell, Fluor Fernald, Inc./MS64
A. Snider, Fluor Fernald, Inc./MS64
W. Zebick, Fluor Fernald, Inc./MS64
ECDC, Fluor Fernald, Inc./MS52-7

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RESPONSES TO U.S. ENVIRONMENTAL PROTECTION AGENCY
TECHNICAL REVIEW COMMENTS ON THE
DRAFT INTEGRATED REMEDIAL DESIGN PACKAGE FOR
THE SOLID WASTE LANDFILL AND FIRE TRAINING FACILITY
(20600-IRDP, 20600-PL-0003, REVISION A)

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

GENERAL COMMENT

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: Not Applicable (NA)

Page #: NA

Line #: NA

Original General Comment #: 1

Comment: The excavation monitoring approach presented in Section 4.0 of the Implementation Plan (IP) does not take into account special conditions that might be encountered at the Solid Waste Landfill (SWL). Section 4.3.1 states that the excavation sideslopes and floor will be monitored using real-time *in situ* scans to determine if waste acceptance criteria (WAC) have been achieved. However, if wastes in the SWL are heterogeneous and excavation does not result in smooth surfaces, *in situ* real-time scans may not be as effective here as in other areas. Therefore, alternative *ex situ* scanning techniques such as scanning each lift of material as it is removed from the SWL should be considered.

Response: Agree that there is a potential for the waste in the SWL to be heterogeneous and cause the excavated surfaces to be rough. However, conditions will not be improved by *ex situ* scanning as the material will remain heterogeneous with a resulting rough surface and could introduce a potential for the spread of above-WAC material in the event above-WAC conditions are detected. Lessons learned from the Area 3A/4A and Area 2, Phase II excavations have proven that routine excavation creates rough surfaces, where conducting minor grading by mechanical means has created an adequate surface that enabled acceptable scanning results to be acquired. However, if necessary, the Excavation Monitoring System (EMS) will be utilized for surfaces that cannot be navigated with conventional Real Time Instrumentation Measurement Program (RTIMP) equipment.

Action: No action.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: NA

Page #: NA

Line #: NA

Original General Comment #: 2

Comment: The IP proposes soil excavation for the SWL and Fire Training Facility (FTF). Active railroad tracks are located near excavation areas in the southeast corner of the SWL and the southern portion of the FTF. Equipment and personnel must maintain a distance of at least 25 feet from the railroad tracks unless the railroad is notified of the planned activities and flagmen are present during all work. The IP should be revised to either include information on the minimum distance requirement for the railroad tracks or describe railroad notification procedures and flagmen requirements.

Response: Agreed.

Action: Two notes will be added to Construction Drawing 99X-5900-G-00727, Traffic Flow and Material Tracking Plan, as follows:

General Note 5

"Notify Waste Pits Remedial Action Project Manager of Rail Operations prior to beginning work which will affect railroad operations."

Keyed Note B

"Provide flagmen at railroad crossings during hauling activities."

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: NA

Page #: NA

Line #: NA

Original General Comment #: 3

Comment: Several of the IP soil remediation drawings provided indicate that straw bales will be used for discharge water sediment control. The Design Criteria Package (DCP) for At- and Below-Grade Remediation of the Former Plant Area, dated May 2002, states on Page 12 that "use of hay bales is not standard engineering practice at the site." The IP should explain why straw bales are proposed for discharge water sediment control even though they are not considered standard engineering practice at the site. In addition, the IP should provide information on the disposal location for the straw bales upon the completion of the excavation project.

Response: Use of hay bales is identified in the DCP as not standard engineering practice at the site. This is because of the leaching problems associated with hay bales. The DCP does not address the use of straw bales, which do not have the leaching problem associated with hay bales. It is sound engineering judgement to use straw bales around catch basins to reduce gross sediment loading from entering the storm sewer system to reduce the likelihood of plugging storm sewers or greatly reducing the storm sewer capacity. The stormwater retention basins are the governing sediment controlling devices for water collected in the storm water sewer system.

Straw bales used around catch basin inlets relative to the SWL and FTF excavations will be disposed in the OSDF.

Action: No action.

SPECIFIC COMMENTS

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 3.1.2

Page #: 3-1

Lines #: 19-22

Original Specific Comment #: 1

Comment: The text states that disposal in the On-Site Disposal Facility (OSDF) should be permitted for FTF soil that does not meet the WAC for organic and metallic constituents of concern (COCs) if soil is treated. The text should be revised to discuss possible treatment alternatives for this soil.

Response: Agreed.

Action: The text in Section 3.1.2 will be revised to include Enhanced Soil Venting as the likely treatment option for organic constituents that are above the OSDF WAC.

Commenting Organization: U.S. EPA

Commentor: Saric

Section #: 5.2.2

Pages #: 5-5

Line #: 38

Original Specific Comment #: 2

Comment: The text presents information required for a dust-alert notification. The text should be revised to state that the duration of the dust suppression activity will be recorded.

Response: Agreed.

Action: Text will be revised to include the duration of the dust suppression activity.

**RESPONSES TO OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENTS
ON THE DRAFT INTEGRATED REMEDIAL DESIGN PACKAGE
FOR THE SOLID WASTE LANDFILL AND FIRE TRAINING FACILITY
(20600-IRDP, 20600-PL-0003, REVISION A)**

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

IMPLEMENTATION PLAN

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

Comment: Biohazard materials, such as bioassay samples, were determined to be included in the Solid Waste Landfill wastes. Please explain how wastes will be handled.

Response: Waste removed from within the historical limit of the Solid Waste Landfill (SWL) will be handled remotely using excavation equipment. No direct handling of the waste will be required unless deemed absolutely necessary. Direct contact may occur only following appropriate evaluation and permitting of work by Industrial Hygiene to address potential hazards and proper personal protection equipment. All Health and Safety controls will be defined in the field level plans and permits after field conditions and hazards are evaluated but prior to the commencement of excavation.

Action: No action.

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

Comment: Please provide cross sections of the SWL and the FTF to include the boring locations and the data verifying contamination boundaries lie within the proposed excavation footprint.

Response: Agreed.

Action: Cross sections will be provided in the revised Integrated Remedial Design Package (IRDP) for both the SWL and Fire Training Facility (FTF), which demonstrate the boundaries of the contamination as described within the text of the document.

Commenting Organization: Ohio EPA
Section #: Executive Summary Pg. #: ES-1 to ES-2 Line #: 33-36 and 2-3 Commentator: DSW
Code: C
Original Comment #: 3

Comment: The primary constituents of concern do not include technetium-99 and tetrachloroethene which are listed as above-WAC materials present. Shouldn't these also be constituents of concern?

Response: Based on the definition of Remediation Area 6 where the SWL and FTF are located, technetium-99 and tetrachloroethene are not listed as primary constituents of concern (COCs), but are secondary constituents of concern as identified in Table 2-7 of the Sitewide Excavation Plan (SEP), which is consistent with Table 2-7 and Table 3-7 in Sections 2 and 3 of this Implementation Plan. The COCs within these tables are too numerous to list in the Executive Summary, therefore this sentence will be removed.

Action: The referenced sentence on Page ES-2, Lines 2-3, will be removed.

Commenting Organization: Ohio EPA
 Section #: 1.3.2 Pg. #: 1-4 Line #: 33-34 Commentator: OFFO
 Original Comment #: 4 Code: C

Comment: The text states that the specifications and drawings for this IRDP "builds upon 3A/4A's excavation designs." Ohio EPA would expect that any specifications that follow 3A/4A design would have been emended to fit the excavation design for Area 6. If not, those corrections must be made.

Response: Agreed. Technical specifications for excavation of the SWL/FTF (Document 20300-TS-0001) were generated for general remediation excavation, however they contain specific requirements appropriate for these and future remediation projects. Where more project-specific requirements are necessary, they will be communicated on design drawings or within supplemental technical specification sections.

Action: No action.

Commenting Organization: Ohio EPA
 Section #: 1.5 Pg. #: 1-10 and 1-13 Line #: 35 and 5 Commentator: DSW
 Original Comment #: 5 Code: C

Comment: It is not necessary, nor in all cases desired, to "restore positive drainage" as evidenced by removal actions in areas such as the Southern Waste Units. Please delete the reference or replace with post-remedial grading will be consistent with the goals of the Natural Resource Restoration Plan.

Response: Agreed.

Action: References to restoring positive drainage will be removed.

Commenting Organization: Ohio EPA
 Section #: Figure 2-3 Pg. #: Line #: N/A Commentator: OFFO
 Original Comment #: 6 Code: C

Comment: Was a confirmatory soil sample or HPGe scan taken at the highest NaI value of 393.19 ppm during the Solid Waste Landfill WAC surface scan? If so, please provide the results of the sampling or scan.

Response: No. A confirmatory high purity germanium (HPGe) detector measurement is only required if the sodium iodide (NaI) value exceeds the trigger level of 721 parts per million (ppm) for total uranium during waste acceptance criteria (WAC) scans.

Action: No action.

Commenting Organization: Ohio EPA
 Section #: 3.3.2.3 Pg. #: 3-6 Line #: 26 Commentator: OFFO
 Original Comment #: 7 Code: C

Comment: Grammatical error on Line 26.

Response: Agreed.

Action: The word "the" will be removed from this sentence.

Commenting Organization: Ohio EPA

Commentator: DSW

Section #: 4.1.5

Pg. #: 4-3

Line #: 13-14

Code: C

Original Comment #: 8

Comment: This section states that since these areas are relatively small, a SWMP will not be written for these activities. Although small in area, these activities need to have the detail provided in a SWMP and should have one written for this plan. Although small in area, these excavations have the potential for releasing significant contaminant loads to the aquifer (the Building 6 basement is an example of a small area with potential for release of significant contaminant loads to the aquifer). A plan should be prepared to demonstrate how contaminated excavation water will be handled, sampling for VOCs and disposition, how quickly water will be removed and where it will go, runoff and runoff controls, controls for the laydown areas and stockpiles, etc.

Response: Agreed. The information requested for inclusion in a Surface Water Management Plan (SWMP) will be adequately addressed within Section 4.1.5 of the Implementation Plan, with requirements detailed in the technical specifications and the design drawings.

Action: Revise the Implementation Plan and design package as necessary to address management of contaminated excavation water, sampling and disposal of water contaminated with volatile organic compounds (VOCs), removal and disposal of excavation water, and control of runoff and runoff. See also responses to Comment Nos. 9 and 15.

Commenting Organization: Ohio EPA

Commentator: DSW

Section #: 4.1.5.1

Pg. #: 4-3

Line #: 22-27

Code: C

Original Comment #: 9

Comment: The water should not be pumped to the SWRB if VOCs are present. Please include a plan of how to deal with VOC contaminated water. Please include drawings showing the catch basins, dewatering lines, and culverts (including those to be plugged and those to be installed).

Response: Agreed. Excavation water that contains individual VOCs in excess of 50 micrograms per liter ($\mu\text{g/L}$) will not be pumped directly to the storm sewer system. Section 4.1.5 will be revised (see responses to Comment Nos. 8 and 15) to address sampling of excavation water prior to pumping. Results will determine if the water may be pumped to the storm sewer system or requires pumping into a tanker for transport to Advanced Waste Water Treatment (AWWT) Facility Phase II treatment.

Sequential excavation dewatering plans for each work area will be incorporated onto the SWL/FTF Layout Plan (Drawing 99X-5500-G-00726). In addition, excavation/drainage Drawings 99X-5500-G-00728 (SWL) and 99X-5500-G-00730 (FTF) will be revised as necessary to provide appropriate detail and notation regarding use of catch basins, dewatering lines and culverts.

Action: Revise Section 4.1.5 of the Implementation Plan and the referenced design drawings as stated above.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 4.1.5.2

Pg. #: 4-4

Line #: 2-8

Code: C

Original Comment #: 10

Comment: This section explains that excavation water containing VOCs in excess of 50 µg/L will be tanked and transported to the AWWT for Phase II treatment.

- A) Will the 50 µg/L limits be detected by using the GC unit?
- B) How many truckloads will it take to manage the above concentrations?

Response: A) The portable gas chromatography (GC) unit can detect certain VOCs below the 50 µg/L limit. However, not all COCs within the FTF can be analyzed by the current portable GC method. Therefore, all excavation water that must be tested for VOCs will be sent to either the onsite laboratory or an approved offsite laboratory, which can provide results for all area specific COCs.

- B) Considering a 10-year, 24-hour storm event over the approximate 1-acre area, with no losses to runoff infiltration or evaporation, approximately 111,000 gallons or 22 truckloads of excavation water would be generated.

Action: No action.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 4.3/General

Pg. #:

Line #:

Code: C

Original Comment #: 11

Comment: DOE must provide an explanation of why the only listed waste resulting from the FTF excavation are Stockpiles FTF-003 and FTF-004. Additional discussion on the generation of the piles and the listed aspects of the FTF HWMU is needed. Include how the current solvent contamination levels affect the listed status of remaining soils and how they relate to above-WAC soils.

Response: The stockpiles (FTF-003 and FTF-004) within the FTF footprint do not contain F-listed solvents and have been characterized as non-hazardous. Section 2.9 of the final report for the Removal Action 28 "Contamination at the Fire Training Facility" explains in detail how these piles were generated and the subsequent testing and results of the piles. The statement on Page 4-8, Line 27 is incorrect and will be revised to reflect the status of these piles and their subsequent disposal.

However, F-listed solvents are still present in a small portion of the soil within the planned FTF excavation. Section 3.3.2.3, Location of Hazardous Waste Management Unit (HWMU), describes the pocket of 1,1,1-trichloroethane that still carries the F-listing. This pocket of soil is the only remaining area within the HWMU that carries the F-listing. Based on U.S. EPA guidance described in "Solid Waste and Emergency Response (530W)", EPA530-F-98-026 dated October 14, 1998, under the contained-in policy, the boundary was defined where soils no longer contain hazardous waste. U.S. EPA considers contaminated environmental media to no longer contain hazardous waste: (1) when they no longer exhibit a characteristic of hazardous waste; and (2) when concentrations of hazardous constituents from listed hazardous wastes are below health-based levels. Although 1,1,1-trichloroethane and toluene have been detected in the general area of the planned FTF excavation, their concentrations outside of the F-listed pocket are well below health based levels. Therefore, all other soils/materials outside of this pocket yet within the planned FTF excavation are not considered to contain any F-listed waste and will not be managed as a listed waste.

No above radiological WAC soil is affected by the pocket of soil with F-listed status.

If needed, a copy of the final report for the Removal Action 28 "Contamination at the Fire Training Facility" can be provided upon request.

Action: Section 3.3.2.3 will be revised as follows:

"As stated in Section 3.1.4, the FTF is a HWMU. The HWMU is divided into two areas (separated by the old North Access Road). The smaller, western portion encompasses the asphalt pad and building. The eastern portion is located within the old North Access Road, the gravel construction road and the southern and eastern fences (Figure 3-1). Although the entire FTF is a HWMU and regulated only for 1,1,1-trichloroethane and toluene based on previous determinations, the only remaining pocket of F-listed environmental media is confined to the southwest section of the Former Skid Pond (Figure 3-10). In this pocket, elevated levels of 1,1,1-trichloroethane were detected however toluene was not detected above its respective FRL.

The biased sampling conducted to investigate the above-WAC tetrachloroethene (PCE) at location A6-FTF-52 and the subsequent PCE bounding locations of A6-FTF-51 and A6-FTF-69 revealed elevated levels of 1,1,1-trichloroethane. 1,1,1-trichloroethane does not have an associated FRL, 1,1,2-trichloroethane does have an FRL of 4.3 milligrams per kilogram (mg/kg). The 1,1,2-trichloroethane FRL was used as the basis of evaluation to determine whether or not 1,1,1-trichloroethane was elevated. The levels of 1,1,1 trichloroethane ranged from 16.2 mg/kg to 110 mg/kg at locations A6-FTF-51, A6-FTF-52, and A6-FTF-69 and were located from the 9-foot depth to the 12-foot depth in one or more of the three locations. This 1,1,1-trichloroethane is co-located with the above-WAC PCE at A6-FTF-52. 1,1,1-trichloroethane has been bound to the north at boring A6-FTF-53 with below "FRL" levels and bound to the south, west, and east at borings A6-FTF-49, A6-FTF-70, and A6-FTF-71, respectively with non-detected (ND) level (Figure 3-10). It has been bound at depth with all of these borings. The removal of all the F-listed 1,1,1-trichloroethane contaminated media will be accomplished with the removal of the above-WAC PCE by extending the above-WAC PCE zone described in Section 3.3.2.2 to encompass the elevated 1,1,1-trichloroethane.

All soil/material outside of the F-listed pocket that is described above yet within the planned FTF excavation area do not contain any F-listed waste and will not be managed as a listed waste."

Figures 3-1 and 3-10 will be revised to incorporate the above information.

Commenting Organization: Ohio EPA
 Section #: 4.3.1 Pg. #: 4-5 Line #: 25-27 Commentator: OFFO
 Original Comment #: 12 Code: C

Comment: How is the material covered and contained for Stockpile AR6-003? What future treatment will be used for the above-WAC organic constituents?

Response: The material will be covered and contained in Stockpile AR6-003 as described in the approved letter to U.S. EPA and Ohio EPA, titled "Request for Concurrence to Initiate Soil Stockpiles", dated November 21, 2001. If the pretreatment test of this stockpiled material fails toxicity characteristic leachate procedure, the future treatment for these soils will likely be Enhanced Soil Venting.

Action: No action.

Commenting Organization: Ohio EPA
 Section #: 4.3.3.1 Pg. #: 4-8 Line #: 12-19 Commentator: OFFO
 Code: C
 Original Comment #: 13

Comment: This paragraph needs clarification. It is understandable that the SWL contains more debris and less concrete and metal however, there is no mention of where the waste will be disposed or how it will be removed. Additionally, what measures will be taken to prevent nuisance odors and disease vectors when the material is stockpiled waiting for disposal.

Response: Debris excavated from the SWL will not be segregated from the surrounding soil or stockpiled prior to disposal in the OSDF. In addition, no measures are planned to prevent potential nuisance odors or disease vectors. However, air monitoring will be conducted during the excavation to monitor for potential hazards requiring additional personal protective equipment or revised work practices. See also response to Comment No. 1.

Action: No action.

Commenting Organization: Ohio EPA
 Section #: 4.3.3 Pg. #: 4-8 Line #: 1-4 Commentator: OFFO
 Code: C
 Original Comment #: 14

Comment: The criteria listed in the two bullets for interim and temporary slopes are too steep and unacceptable to Ohio EPA. The correct criteria is outlined in the Technical Specifications for this Implementation Plan and included in DOE's 3A/4A Implementation Plan.

Response: It is agreed that the slope stability requirements outlined in the technical specifications are more accurate than those referenced in the Implementation Plan text.

Action: Revise Section 4.3.3 of the Implementation Plan to reference slope stability requirements outlined in the technical specifications.

Commenting Organization: Ohio EPA
 Section #: 4.4.1 Pg. #: 4-9 to 4-10 Line #: N/A Commentator: DSW
 Code: C
 Original Comment #: 15

Comment: This section should be included in the SWMP.

Response: As per the responses to Comment Nos. 8, 9, and 18, Section 4.4.1 will be incorporated into Section 4.1.5, which will address storm water and excavation water management.

Action: Incorporate Section 4.4.1 into Section 4.1.5.

Commenting Organization: Ohio EPA
 Section #: 4.4.1 Pg. #: 4-10 Line #: 10 Commentator: OFFO
 Code: C
 Original Comment #: 16

Comment: Explain the meaning of a 72-hour dewatering requirement.

Response: The requirement, as stated in the DCP, Section 5.4 and Technical Specification Section 02275, Paragraph 3.1.D, means that active excavations are dewatered within 72 hours after a major storm event (10-year 24-hour). The original intent of the 72-hour requirement was to ensure that a Contractor performing the remediation provided adequate pumping equipment in order to prevent extended delays in construction due to excess waters in the excavation.

Action: No action.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 4.6

Pg. #: 4-13

Line #: 2-21

Code: C

Original Comment #: 17

Comment: This document should include detail on post-remediation grading and topography as well as interim restoration activities. It is unacceptable to leave these areas unstabilized until such time as final restoration plans are developed. This issue has been revisited in the past and acceptable criteria have been established. Please refer to Section 3.6 in DOE's 3A/4A Implementation Plan, 20800-PL-0002, Rev. 0, Final, dated May 2001.

Response: Agreed. Remediated areas will be graded after excavation to ensure stable side slopes exist. In addition, the excavated areas will be stabilized through seeding. Erosion matting will be used for further stabilization as needed.

Action: This section will be revised as noted above to include appropriate detail on post-remediation grading and stabilization, consistent with the 3A/4A Implementation Plan.

Commenting Organization: Ohio EPA

Commentator: DSW

Section #: 7.1.4.2

Pg. #: 7-10

Line #: 33-39

Code: C

Original Comment #: 18

Comment: Excavation water will also need to be sampled per Section 4.4.1.

Response: Agreed.

Action: Revise Section 4.4.1 as it is incorporated into Section 4.1.5 and add sampling of excavation water to Section 7.1.4.2.

Commenting Organization: Ohio EPA

Commentator: DSW

Section #: Drawing 99X-5500-G-00728

Pg. #: NA

Line #: NA

Code: C

Original Comment #: 19

Comment: Inlet protection (Keyed note 3) should be installed per Rainwater and Land Development. Straw bales are not acceptable. Silt fence should be installed along contours (Keyed note H) per Rainwater and Land Development, not across contours.

Response: Section 5.4 of the Design Criteria Package states the following:

"...The surface water management system for each remedial area will be designed to meet the following requirements: ...

- Surface water from disturbed areas will be sent through a sediment basin or shall pass through an engineered erosion control structure, such as silt fences and/or riprap check dam, to remove gross suspended solids prior to being released into the storm sewer system..."

And,

"The stormwater and sediment control structures will be evaluated, selected, designed, and coordinated, as appropriate, to be consistent with the objectives set forth in Storm Water Pollution Prevention Plan (RM-0039), Rainwater and Land Development, Ohio's Standard for Stormwater Management Land Development and Urban Stream Protection, and sound engineering judgement. The standards set forth in Ohio Department of Natural Resources

(ODNR) will not be incorporated into the design of this project in areas where runoff from disturbed surfaces are either discharged into the existing storm sewer system for subsequent AWWT Phase I treatment or collected for AWWT Phase II treatment. ... Use of hay bales is not standard engineering practice at the site. Silt fence and/or riprap check dams will be used as the primary erosion control devices."

Stormwater collected in the site's storm sewer system is not released to natural drainage but is discharged into the storm water retention basins. Consistent with the objectives set forth in ODNR, the stormwater retention basins are the governing sediment controlling devices for water collected in the storm water sewer system. Additionally, the stormwater retention basins have been upgraded with the ability to clean sediments from the bottom of the basins. As a good engineering practice, additional control devices are used where needed. Although, silt fence and riprap check dams are the primary erosion control devices, they are not the only devices that may be used. Use of hay bales is identified in the DCP as not standard engineering practice at the site. This is because of the leaching problems associated with hay bales. The DCP does not address the use of straw bales, which do not have the leaching problem associated with hay bales.

It is sound engineering judgement to use straw bales around catch basins to reduce gross sediment loading from entering the storm sewer system to reduce the likelihood of plugging storm sewers or greatly reducing the storm sewer capacity. The storm sewer line that drains catch basins CB229 and CB230 will remain in service for 1 to 3 years. Minor sediment disposition in this line resulting from SWL excavation should have minimum impact on the storm sewer system due to the brief period of use.

Silt fences are placed across two ditches perpendicular to the direction of flow. This is an acceptable use of silt fence where discharge capacities and velocities within the ditch are low. In the two ditches on the west side of the SWL excavation area, both the discharge capacity and velocity will be very low. The only other silt fence shown on the drawing (in the northeast corner of the excavation) is placed approximately parallel to existing contours.

Action: No action.

Commenting Organization: Ohio EPA

Commentator: DSW

Section #: Drawing 99X-5500-G-00730 Pg. #: NA Line #: NA

Code: C

Original Comment #: 20

Comment: General note 15 should read that excavation water should be handled in accordance with Section 4.4.1 of the Implementation Plan. Silt fence should be installed along contours (Keyed note H) per Rainwater and Land Development, not across contours. It appears that construction of diversion berm (Keyed note G) should be finished before excavation begins to prevent runoff into the excavation.

Response: General requirements for storm water control are listed in Technical Specification Section 02275. Specific requirements for storm water control are shown on Drawings 99X-5500-G-00728 [Excavation/Drainage Plan (SWL)], 99X-5500-G-00730 [Excavation/Drainage Plan (FTF)], and 99X-5500-G-00738 (Civil Details Sheet 1). Sequential dewatering plans will be added to Drawing 99X-5500-G-00726 (Layout Plan) detailing the requirements for both SWL and FTF remediation. The stormwater control requirements listed in the Technical Specifications and the revised drawing package will be made in agreement with the revised Section 4.1.5 of the Implementation Plan.

000013

The silt fence comment does not seem to refer to Drawing 99X-5500-G-00730. There is no Keyed Note H on Drawing 99X-5500-G-00730, and the silt fence on Drawing 99X-5500-G-00730 is positioned approximately parallel to the existing contours. Perhaps this comment is in reference to Drawing 99X-5500-G-00728 (see response to Comment No. 19).

A portion of the berm can be constructed prior to soil excavation within the remedial area; however, access must be maintained on the north side of the excavation for haul trucks and construction equipment. This access can be maintained via the North Construction Access Road that runs through the center of the FTF remedial area. As such the roadway should remain open and unblocked until nearing the end of the excavation effort. The portion of the diversion berm on both sides of the North Construction Access Road can be constructed prior to the excavation.

Action: Sequential dewatering plans will be added to Drawing 99X-5500-G-00726 (Layout Plan) detailing the requirements for both SWL and FTF remediation in accordance with the revised Section 4.1.5 of the Implementation Plan.

Keyed Note G will be modified as follows:

"CONSTRUCT/MAINTAIN PORTION OF DIVERSION BERM ON BOTH SIDES OF NORTH CONSTRUCTION ACCESS ROAD PRIOR TO EXCAVATION. REMOVE ROADWAY PAVEMENT AND COMPLETE CONSTRUCTION OF DIVERSION BERM AFTER FTF EXCAVATION."

Commenting Organization: Ohio EPA
 Section #: Drawing 99X-5500-G-00738 Pg. #: NA Line #: NA Commentator: DSW
 Original Comment #: 21 Code: C
 Comment: Inlet protection and silt fence installation detail should be consistent with Rainwater and Land Development.

Response: See response to Comment No. 19.

Action: No action.

Commenting Organization: Ohio EPA
 Section #: Appendix A/Design Criteria Package Pg. #: Line #: Commentator: OFFO
 Original Comment #: 22 Code: C
 Comment: In reviewing the Design Criteria Package, several technical specifications and some language from 3A/4A DCP may or may not be appropriate. The language in the text and the specifications should be emended for the SWL and the FTF, then applied.

Response: Agreed. However, in addition to the SWL/FTF, the referenced DCP applies to Area 2, Phase II, Areas 3A, 4A, 3B, 4B, 5, and the remainder of 6. The DCP, as well as the technical specifications, are written to cover multiple project scopes in order to provide consistency in requirements for excavation/remediation projects. Document language and specification requirements apply to each project as they pertain to the remediation activity scope.

Action: No action.

000014

**TECHNICAL SPECIFICATIONS FOR SOIL
AND DISPOSAL FACILITY PROJECT
SOIL EXCAVATION PROJECTS**

Commenting Organization: Ohio EPA
Section #: 3.1/02205 Pg. #: 6 Line #: R Commentator: OFFO
Original Comment #: 1 Code: C

Comment: In the event of a possible archeological find during an excavation, not only is the Construction Manager notified, but isn't someone from Cultural Resources contacted?

Response: Yes. A representative of Cultural Resources is contacted in the event of possible archeological discovery during excavation. Consistent with previous design packages, this technical specification package often refers to the Construction Manager as the first point of contact for issue resolution.

Action: Technical specification Section 02205, Item 3.1.R, will be revised to read as follows:

“...immediately notify the Construction Manager for evaluation by Cultural Resources”.

In addition, the technical specification package will be reviewed for language where reference to responsible site organizations may clarify requirements.

Commenting Organization: Ohio EPA
Section #: 3.1/02205 Pg. #: 6 Line #: S & T Commentator: OFFO
Original Comment #: 2 Code: C

Comment: During an excavation when special materials are discovered or a solvent, isn't WAO involved in assessing this type of material and determining disposal?

Response: Yes. The Waste Acceptance Organization (WAO) is involved in assessing excavated materials for disposition.

Action: Section 02205, Items 3.1.S and T, will be revised to read as follows:

“...immediately notify the Construction Manager for evaluation by WAO...”

Commenting Organization: Ohio EPA
Section #: 3.4/02205 Pg. #: 8 Line #: C Commentator: OFFO
Original Comment #: 3 Code: C

Comment: If SP-7 is full, will above-WAC material be taken to the WP's?

Response: Yes. Material designated for SP-7 disposition may be hauled directly to the Waste Pits Remedial Action Project. See Section 02205, Item 3.13.B, of the Technical Specifications.

Action: No action.

Commenting Organization: Ohio EPA
Section #: 3.5/02205 Pg. #: 9 Line #: C Commentator: OFFO
Original Comment #: 4 Code: C

Comment: If RCRA material is an issue and treatment is warranted, where will the material be staged for or until treatment? How will the storage of the material comply with RCRA regulations?

Response: If RCRA material is encountered during SWL/FTF excavation and it is not co-located with above WAC radiological constituents, it will be staged in stockpile AR6-003 created during Area 3A/4A site preparation activities. Stockpile AR6-003 is managed in accordance with the approved letter to U.S. EPA and Ohio EPA, titled "Request for Concurrence to Initiate Soil Stockpiles", dated November 21, 2001. If RCRA material is encountered during the SWL/FTF excavation and it is co-located with above WAC radiological constituents, it will be containerized for future off-site disposal.

Action: No action.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 3.1/02207

Pg. #: 3

Line #:

Code: C

Original Comment #: 5

Comment: Within this section under "General", shouldn't "A" from Section 3.1/02207 in the Specifications for 3A/4A be included?

Response: Section 02207, Item 3.1.A, of the March 2001 Revision 0, Area 3A/4A design package (prepared by Lockwood-Greene) will be added to this technical specification package. However, the paragraph will be written to specify that only known above-WAC and RCRA areas in the path of the isolation trench are required to be excavated prior to performing trenching.

Action: Add the following requirement to Section 02207, Item 3.1:

"Excavate known Above-WAC and RCRA areas in the path of the isolation trench in accordance with Section 02205 prior to performing trenching activities in those areas."