



Department of Energy

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3781

JUL 31 2001

Mr. James A. Saric, Remedial Project Manager
United States Environmental Protection Agency
77 West Jackson Boulevard
Chicago, IL 60604-3590

DOE-0773-01

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

Dear Mr. Saric and Mr. Schneider:

**TRANSMITTAL OF RESPONSES TO THE UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY AND OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENTS
ON THE DRAFT INTEGRATED REMEDIAL DESIGN PACKAGE FOR AREA 2, PHASE I
NON-WASTE UNITS PERIMETER AREA**

- References: 1) Letter, J. Saric to J. Reising, "A2, PI Perimeter Area IRDP,"
dated June 21, 2001
- 2) Letter, T. Schneider to J. Reising, "Comments – Implementation
Plan for A2PI Non-Waste Units," dated June 27, 2001

In accordance with the Site-wide Excavation Plan, enclosed for your approval are responses to the United States Environmental Protection Agency (USEPA) and Ohio Environmental Protection Agency (OEPA) comments on the draft Integrated Remedial Design Package.

Mr. James A. Saric
Mr. Tom Schneider

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JUL 31 2001
DOE-0773-01

If you have any questions regarding these documents 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

Enclosures: As Stated

cc w/enclosure:

K. Chaney, EM-31/CLOV
N. Hallein, EM-31/CLOV
R. J. Janke, OH/FEMP
G. Jablonowski, USEPA-V, SRF-5J
T. Schneider, OEPA-Dayton (three copies of enclosures)
F. Bell, ATSDR
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M. Schupe, HSI GeoTrans
R. Vandegrift, ODH
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cc w/o enclosures:

K. Nickel, OH/FEMP
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J. Blankemeyer, Fluor Fernald, Inc./MS52-0
D. Carr, Fluor Fernald, Inc./MS2
J. Chiou, Fluor Fernald, Inc./MS52-0
T. Crawford, Fluor Fernald, Inc./MS52-0
T. Hagen, Fluor Fernald, Inc./MS65-2
S. Hinnefeld, Fluor Fernald, Inc./MS31
D. Russell, Fluor Fernald, Inc./MS52-0
T. Walsh, Fluor Fernald, Inc./MS46
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 2, PHASE I NON-WASTE UNITS PERIMETER AREAS
(20430-PL-0001, REVISION A)**

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

GENERAL COMMENTS

Commenting Organization: U.S. EPA
Section #: Not Applicable (NA) Pg. #: NA Line #: NA Commentator: Saric
Code: NA
Original Comment #: 1

Comment: The perimeter areas covered by the implementation plan are complex and include many named features. For example, the Executive Summary discusses the "West Seepage Station" and "Well House 13"; however, these two locations do not appear in Figure 1-3 or any other figure in the implementation plan. It is assumed that these two locations are the "West Pumping Station for Seepage Collection" and "Extraction Well House No. 13," respectively, which are shown in Drawing No. 92X-5500-G-02026, the Existing Conditions Plan. All perimeter area features named in the implementation plan should be shown in Figure 1-3. In addition, consistent nomenclature should be used for these features in the text and figures to avoid confusion.

Response: Concur.

Action: The Integrated Remedial Design Package (IRDP) will be checked for consistency in nomenclature, not only in the IRDP, but also between documents and figures. Appropriate corrections will be made.

Commenting Organization: U.S. EPA
Section #: NA Pg. #: NA Line #: NA Commentator: Saric
Code: NA
Original Comment #: 2

Comment: The text discusses excavation of retention basins, drainage ditches, roadways, and so on; however, no schedule for performing these tasks is provided. It is not clear which task will be completed first, second and so on; how long each task will take to complete; or what measures are planned for protection of partially excavated areas such as drainage ditches during storm events. Although surface runoff diversion will be conducted, partial excavated areas can still be flooded during a heavy rainstorm. The text should be revised to include a schedule and a work sequence for excavation tasks as well as contingency plans for protection of partially excavated areas.

Response: Concur.

Action: The text will include the following sequence of construction activities for clarification:

Start Immediately:

1. Removal of the Well House and West Seepage Station
2. Removal of the stockpiles in the South Field
3. Remediation of the turnaround area (NISP-1)
4. Removal of Ditch 2

5. Removal of the liner and Basin 1
6. Open the drainage flow to Paddys Run

Pending Surface Water Monitoring Results by OEPA:

7. Road between the South Field and the Active Flyash Pile
8. Riprap
9. Basin 2
10. Road North of Southern Waste Units
11. Basin 4

The document will be revised to include schedule commitments as follows:

| | |
|--|-----------------|
| Start of Excavation | August 1, 2001 |
| Draft of CDL and Certification PSP to Agencies | August 15, 2001 |
| Certification Report (Phase 1) | April 1, 2002 |

Note: Certification will occur in phases, which will be included in the Certification Design Letter (CDL). Phase I will include the South Field, Inactive Flyash Pile, and the Carolina Area. Phase II will include the roadway, ditch and Basin 2. Certification will occur as these areas become accessible.

Commenting Organization: U.S. EPA
Section #: NA Pg. #: NA Line #: NA Commentator: Saric
Original Comment #: 3 Code: NA

Comment: Typically excavation work is shown in cross sections and profiles so that the volumes of materials can be calculated. Cross sections and profiles are also required to show the final grade and proper slopes. However, no cross sections or profiles for excavation of retention basins, ditches, or roadways have been submitted; therefore, the total volume of soil to be removed is unclear. The construction drawings should include appropriate cross sections and construction profiles to clearly show the proposed grades and the volumes of material to be removed.

Response: There is a significant amount of flyash and debris expected in the Non-Waste Unit area. Since the excavation needs to remove all the flyash and debris encountered, which cannot be completely defined before excavation, the excavation volume cannot be accurately estimated at this point. Additional cross sections will not provide useful information for volume estimation.

Action: None.

SPECIFIC COMMENTS

IMPLEMENTATION PLAN

Commenting Organization: U.S. EPA
 Section #: 3.4 Pg. #: 3-5 Line #: NA Commentator: Saric
 Code: C

Original Comment #: 1

Comment: The text states that additional materials such as piping, geotextile and geomembrane will require sized reduction before they are transported to the On-Site Disposal Facility (OSDF) for placement. It is not clear whether the geomembrane liners will be removed in one piece and then reduced in size or whether they will be cut in small sections as they are being removed. It is also not clear whether the various materials will be decontaminated prior to their placement in the OSDF. The text should be revised to clarify these issues.

Response: All oversize material will be sized reduced prior to placement in the OSDF according to the waste acceptance criteria guidelines. There is no need for decontamination of these materials before placement in the OSDF.

Action: None.

Commenting Organization: U.S. EPA
 Section #: 3.4.2 Pg. #: 3-6 Line #: NA Commentator: Saric
 Code: C

Original Comment #: 2

Comment: The text states that "before remediation of the Perimeter Areas, the turnaround gravel and geotextile, and the soil from NIMS No. 1 will be excavated by another project for use of the OSDF Cell 1 cap construction." The text does not provide a schedule for this work or state how long it will impact other work to be performed as part of perimeter area remediation. Moreover, it is not clear why work in the turnaround area, Non-Impacted Material Stockpile (NIMS) No. 1 and former running track was included as part of perimeter area remediation if completion of the work depends on another project what is beyond the scope of the perimeter area remediation. The text should be revised to address these issues.

Response: The NIMS No. 1 has been removed early this year. Completion of the former running track will not depend on another project.

Action: None.

Commenting Organization: U.S. EPA
 Section #: 3.6 Pg. #: 3-14 Line #: NA Commentator: Saric
 Code: C

Original Comment #: 3

Comment: This section discusses the planned excavation sequence. As noted at various points in the implementation plan, this sequence is quite complex. Many tasks cannot occur until one or more other tasks, such as excavation of an area, construction of a berm, removal and rebuilding of a roadway, and so on, have been completed. The implementation plan should be revised to provide a critical path diagram showing are outside the scope of the plan.

Response: Concur.

Action: See action for U.S. EPA Comment No. 2.

Commenting Organization: U.S. EPA

Commentator: Saric

Section #: 3.6

Pg. #: 3-14

Line #: NA

Code: C

Original Comment #: 4

Comment: The text states that the initial phase of work (Part One) is scheduled for summer 2001 and that the remaining work (Part Two) is expected to be performed beginning in Fiscal Year 2004. The text goes on to state in Section 3.7 that precertification and certification activities for the perimeter areas will be established after site funding and scheduling issues are resolved. It is therefore unclear when precertification and certification activities will be completed for Part One remediation areas. Given the length of time currently anticipated between the Part One and Part Two work. At a minimum, the text should be revised to include a schedule for submittal of a certification design letter and certification report for the perimeter areas to be remediated as part of Part One work.

Response: Concur.

Action: Certification will be conducted in phases according to the sequence of excavation. These phases will be discussed in the CDL and Certification PSP. The text of the Implementation Plan will be revised to include the following schedule dates:

Draft CDL and Certification PSP to the Agencies
Certification Report (Phase 1)

August 15, 2001
April 1, 2002

**RESPONSES TO OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENTS
ON THE DRAFT INTEGRATED REMEDIAL DESIGN PACKAGE FOR
AREA 2, PHASE I NON-WASTE UNITS PERIMETER AREAS
(20430-PL-0001, REVISION A)**

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

GENERAL COMMENTS

IMPLEMENTATION PLAN

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

Comment: The document fails to include dates for start and/or completion of the work proposed within the implementation plan. The document should be revised to include a schedule for the proposed work. The lack of a schedule has lead to significant confusion during the review regarding when which components will be completed. Additionally, the development of a certification schedule and draft Cert PSP will allow for efficient implementation of certification and restoration activities immediately following remediation.

Response: Agree.

Action: The document will be revised to include schedule commitments as follows:

| | |
|--|-----------------|
| Start of Excavation | August 10, 2001 |
| Draft of CDL and Certification PSP to Agencies | August 15, 2001 |
| Certification Report (Phase 1) | April 1, 2002 |

Note: Certification will be conducted in phases according to the sequence of excavation. These phases will be defined in the CDL and Certification PSP. Phase 1 will include the South Field, Inactive Flyash Pile, and the Carolina Area.

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

Comment: Please clarify the following. The Non-Impacted Material Stockpile (NIMS) and the Turnaround are names which were used interchangeably throughout the document to describe areas/stockpiles located in the middle of the "turnaround" or gravel road in the SWU. Please make the text clear as to whether it is the same area or two different remediation areas. In addition, please do the same regarding the description list for the remediation areas.

Response: Agree.

Action: Per response to U.S. EPA Comment No. 1, the Integrated Remedial Design Package (IRDP) will be checked for consistency in nomenclature, not only within the IRDP, but also between documents. Appropriate corrections will be made.

SPECIFIC COMMENTS

Commenting Organization: Ohio EPA

Commentator: DSW

Section #: 1.3.3.1

Pg. #: 1-6

Line #: 2-5

Code: C

Original Comment #: 3

Comment: The Indiana Bat has recently been captured in the Paddys Run Corridor on site. This section should be revised to address this and what measures will be taken to preserve/enhance habitat for the Indiana Bat.

Response: Based on study of the Indiana Bat and surveys conducted at the FEMP, the northern portion of Paddys Run is the most suitable habitat on the Fernald Site. While the southern portion of Paddys Run may be used by the Indiana Bat, the lack of a continuous water supply and ideal roost trees make the area less suitable than the northern portion of Paddys Run. The preservation of existing trees to the degree possible during construction is the near term action that is most beneficial to the Indiana Bat. The restoration of the Southern Waste Unit (SWU) to create additional floodplain and expand the Riparian Corridor is most beneficial to the Indiana Bat in the long term.

Action: A statement will be added to the Implementation Plan acknowledging the potential use of the SWU area by the Indiana Bat. The Implementation Plan will also recognize that existing trees are being preserved to the degree possible to minimize impacted to the Indiana Bat and other wildlife and that restoration plans for the SWU will create new habitat that can be used by the Indiana Bat in the future.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 1.3.3.1

Pg. #: 1-6

Line #:

Code: C

Original Comment #: 4

Comment: Considering this project will be closely tied with restoration of the area and that the work is occurring within a sensitive riparian/floodplain habitat, construction activities should be closely coordinated with the Fluor Natural Resources group and the Natural Resource Trustees.

Response: Agree.

Action: Construction activities are being planned in coordination with the Fluor Natural Resources Group, DOE and the Fernald Natural Resources Trustees (NRTs). Future NRT meetings will continue to focus on the construction activities in the SWU to ensure that the concerns of all parties are factored in the project to the degree possible.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 1.4

Pg. #: 1-8

Line #: 1-6

Code: C

Original Comment #: 5

Comment: The restoration portion of the project should be completed as soon after completion of remediation as possible and to the greatest possible extent to coordinated with the remediation to optimize usage of funds.

Response: Consistent with Section 3.5, entitled "Postremediation Action," and Appendix F of the Sitewide Execution Plan, DOE will accelerate the restoration of natural resources into remedial designs and excavations whenever possible. Such past examples that have at least accelerated grading designs include Area 1 Phase II (A1PII) Southwest Fill Area, Area 2 Phase I (A2PI) Carolina Area, A2PI former Active Flyash Pile (AFP) footprint,

and Area 2 Phase III Part Two former Radium Hot Spot. This acceleration took a team effort consisting of DOE, OEPA, U.S. EPA, and Fluor Fernald Inc.'s Natural Resources, Construction, and Engineering groups. Such cooperation and effort will continue.

Action: The SWU area will be stabilized using seeding, coir matting and coir logs immediately following excavation and certification. The use of vegetation as appropriate to stabilize the SWU will also occur as soon after remediation as possible, but may be delayed until spring due to the timing of construction completion late in the calendar year. Integration between Fluor Fernald, DOE, the Agencies and NRTs will continue to occur to minimize the time required for certification allowing stabilization and restoration as soon as possible.

Commenting Organization: Ohio EPA

Commentator: DSW/OFFO

Section #: Figure 1-2

Pg. #:

Line #: Figure 1-2

Code: C

Original Comment #: 6

Comment: The Perimeter Area delineation includes/excludes some areas the reasons for which are not clear. For example, Basin 3 is included in the footprint of the Perimeter Area, however basin has already had the geomembrane removed and has been excavated, however the area south and west of Basin 3, which had what appeared to be flyash present during installation of components, is not included in the footprint. Also included is a narrow section designated A2PI Part One (Figure 1-2) that drains from the wheel wash facility to the ditch south of the SWRB, and it is unclear as to why this is part of the Perimeter Area footprint. The area that had geomembrance to the northwest of the construction support area is not included in the footprint. A small portion between the Carolina Area and the Turnaround Pile is also excluded from the area. Please define further the rationale for the Perimeter Area delineation including the above, as well as define the areas that will address all non-selected portions.

Response: The figures will be revised to clarify the Perimeter Area delineation as presently written in the Implementation Plan's Introduction. Namely, A2PI consists of the SWUs, South Field (SF), AFP, and the Non-Waste Unit (NWU) Perimeter Area. The NWU Perimeter Area was further divided into three subareas, namely the Carolina Area. All three areas will be depicted in the figures. Finally, as shown on the excavation drawings, the NWUs Perimeter Area was divided into two excavation parts. Part One included areas that can be excavated this year and Part Two includes the remaining A2PI locations.

A new figure will also be created and included in the Implementation Plan to show locations of impacted material, such as the "area south and west of Basin 3" that may contain flyash, but was unable to be excavated as part of A2PI SWUs excavation. This inability was due to their close proximity to structures, utilities, or other features like groundwater extraction well houses that must remain operational after remedial excavation but nevertheless must be tracked for future soil remediation.

The "narrow section designated Area 2, Phase II (A2PII) Part One" is incorrectly shown as part of the NWU Perimeter Area footprint. The narrow section represents the 3-inch diameter HDPE above-ground discharge pipeline from Basin 4 that can be removed once the Equipment Wash Facility is no longer in operation. Though the pipeline is planned to be removed as part of the Perimeter Area, it is located within A2PII Part One. The figure will be corrected.

The former footprint of NIMS No. 2, referred to as "the area that had geomembrane to the northwest of the construction support area," should have been included in Figure 1-2 as part of A2PI NWU Perimeter Area. The figure will be corrected.

The "small portion of area between the Carolina Area and the Turnaround Pile" in which bio-engineering materials or tree logs were stored, should also have been included as part of the NWU Perimeter Area and will be corrected.

Action: Figure 1-2 and other Implementation Plan figures will be revised as noted above. Also, a new figure will be created and included in the Implementation Plan to show unexcavated impacted material in previously excavated A2PI locations.

Commenting Organization: Ohio EPA
Section #: 2.1.2.1 Pg. #: 2-2 Line #: Commentator: OFFO
Original Comment #: 7 Code: C

Comment: The hotspot criteria was developed for certification areas not as part of predesign investigations. In an area on contamination, above the FRL is determined from predesign scanning than supplement characterization by physical sampling necessary, followed by excavation of any above-FRL materials. These areas which exceed the FRL require remediation. The document should be revised to incorporate excavation of these areas.

Response: Agreed. There are two areas, which show real-time results as above-FRL. One of these locations is west of Basin 1. This area is included in the remediation. The second area of above-FRL data is located north of the East-West Construction Haul Road.

Action: No action is required for the above-FRL location, which is included in the excavation. The second area showing above-FRL data will be included in A2PII and removed from A2PI. Further investigation with physical sampling will be conducted with a variance to the A2PII Part Two and Three Project Specific Plan (PSP). Also, the reference to the hot spot criteria will be removed from the text and the data for the areas not included in this Implementation Plan will be removed.

Commenting Organization: Ohio EPA
Section #: 2.2 Pg. #: 2-3 Line #: 23 Commentator: OFFO
Original Comment #: 8 Code: C

Comment: Be has been detected above the FRL and is known to be associated with flyash. Be must be kept as an ASCOC. The text states "no above-FRL concentrations of any secondary COCs were detected in the Perimeter Area during predesign." Were any secondary COCs even sampled for? The appendix includes no data other than that of primary radionuclide COCs. If no sampling for secondary COCs was conducted, this misleading sentence must be removed from the text. If sampling was conducted, include the results.

Response: 1. Agree.
2. Noted. The sample results shown in the Implementation Plan are only those results collected during predesign investigation of this area, which included only the primary COCs. All historical sample data are addressed in the PSP for predesign investigation of this area.

Action: 1. Be will be retained as an ASCOC and Section 2.2 will be revised accordingly.
2. None required.

Commenting Organization: Ohio EPA
 Section #: 2.3.2 Pg. #: 2-4 Line #: 10-11 Commentator: OFFO
 Code: C
 Original Comment #: 9

Comment: This section states that portions of Retention Basin 1 and lines from Well Hose 13 will be removed. What exactly will be removed, and when will the remaining portions be removed?

Response: The section states correctly that Retention Basin 1 geomembrane liner and a portion of the transfer line from Retention Basin 1 will be removed. However, the section does not address the fact that Retention Basin 1 clay liner will remain following execution of this activity. Nor does it adequately address that the utilities needed to support extraction well pumping will remain until that operation is complete.

Action: The section will be revised to adequately address features to remain after completion of this activity, the extent to which these features will remain, and the logic behind these decisions.

Commenting Organization: Ohio EPA
 Section #: 3.4 Pg. #: 3-3 Line #: 33-34 Commentator: OFFO
 Code: C
 Original Comment #: 10

Comment: In the list for general excavation, two bullets state that removal will be done "by others." Please explain who are the "others" being referred to in text.

Response: In each case, "others" refers to the OSDF Cell 1 Cap contractor, who has completed removal of the "Turnaround," as well as NIMS No. 1. Remaining scope related to these two bullet items is the 6-inch scrape of NIMS No. 1 stockpile footprint and removal of underlying geotextile and geomembrane liner.

Action: The entire list of bullet items will be revised not only to clarify the Perimeter Area excavation scope, but to clarify nomenclature per response to OEPA Comment No. 2.

Commenting Organization: Ohio EPA
 Section #: 3.4 Pg. #: 3-4 Line #: 5-6 Commentator: OFFO
 Code: C
 Original Comment #: 11

Comment: The West Seepage Station is not identified on Figure 1-3. Please clarify the location of this station.

Response: Agree.

Action: Figure 1-3 will be revised to identify the location of the West Seepage Station.

Commenting Organization: Ohio EPA
 Section #: 3.4.1 Pg. #: 3-6 Line #: 1-6 Commentator: OFFO
 Code: C
 Original Comment #: 12

Comment: The NIMS No. 1 is gone so it shouldn't account for anything in this design. Additionally, Ohio EPA believes some liner/fill will be necessary in Basin 2 to prevent direct loading of any spills/contaminated runoff directly into the aquifer. This was our basis for allowing installation of the geosynthetic liner within Basin 2 to expedite protection of the aquifer. Consistent with that approach it is likely that some fill will be necessary to slow infiltration to the aquifer.

Response: Concur. NIMS No. 1 was removed by the OSDF Cell 1 Cap contractor and should not be included in this design.

Additionally, based on July 2, 2001 discussions between representatives of OEPA, DOE, and the Soil and Disposal Facility Project, it is anticipated that present impacted areas that drain into Basin 2 will be excavated prior to Basin 2 geomembrane removal, as stated in the Implementation Plan. These impacted areas include the riprap-lined Ditch 8 located on the eastern side of the former SF and the North-South Access Road located between the former SF and former AFP. Prior to excavation of this impacted area and Basin 2, OEPA will monitor surface water flow within Ditch 8 resulting from perched water seepage during non-rain events to assist in determining any potentially impacts to the aquifer after Basin 2 liner removal.

Action: Excavation of NIMS No. 1 will be removed from the design. DOE will await the sampling results by OEPA within Ditch 8 and to determine the need or extent of any filling required for aquifer protection.

Commenting Organization: Ohio EPA
Section #: 3.4.3 Pg. #: 3-7 Line #: 7-11 Commentator: DSW
Original Comment #: 13 Code: C

Comment: During the remediation of the Carolina Area, buried debris was removed that extended under the road by Basin 2. The debris was not removed under the roadbed. The 6-inch scrape and utility chase will not address the removal of this debris.

Response: Agree. However, the debris removed during remediation of the Carolina Area appeared to extend under the utilities feeding the extraction well operation, in the location where utilities pass under the road. Until the well house goes offline, utilities feeding the operation will remain, preventing the excavation of debris from under the lines. The buried debris will be noted on the new figure mentioned in the response to OEPA Comment No. 6.

Action: The buried debris will be delineated on the new figure as mentioned above.

Commenting Organization: Ohio EPA
Section #: 3.4.4 Pg. #: 3-7 Line #: 20-22 Commentator: OFFO
Original Comment #: 14 Code: C

Comment: Actions to be taken following the 6-inch scrape are not explicitly stated. Ohio EPA expects that visual observation will drive any additional excavation in association with real time scans off all areas.

Response: Agree.

Action: A Waste Acceptance Organization (WAO) representative will be present during all excavation activities. Text will be revised accordingly.

Commenting Organization: Ohio EPA

Commentator: DSW

Section #: 3.4.4

Pg. #: 3-9

Line #: 1-4

Code: C

Original Comment #: 15

Comment: It is unclear how the additional of a berm at Ditch 7/Basin 2 will raise the level of Basin 2 without impeding flow from the upgradient areas into Basin 2. It would seem prudent to allow free flow into Basin 2 and any overflow to back into the excavated Ditch 7 area rather than construct a berm. The drawing of the final grading of this area does not show a berm but free flow into and out of the west end of Basin 2. This is preferable to installation of a berm. Please provide additional information about this (drawings with surface water flow and more detailed narrative).

Response: The purpose of the berm where Ditch 7 enters Basin 2 is to maintain existing storage volume within Basin 2 for storm water runoff from impacted areas that may not be excavated this calendar year. These impacted areas include the riprap-lined Ditch 8 located on the eastern side of the former SF and the North-South Access Road located between the former SF and former AFP. Presently, the top of the western end of Basin 2 is at elevation 537.0 whereas the bottom of Ditch 7 that enters Basin 2 adjacent to the overflow outlet is at elevation 534.0 (see Section B-B on Drawing 92X-5500-G-02032). The berm and associated rework of the Ditch 7 geomembrane liner allows the current net storage depth of Basin 2 stormwater to be maintained. Therefore, it is the bottom of Ditch 7 that is effectively raised to maintain the level of Basin 2.

Action: The narrative will be revised and additional surface water flow directional arrows will be shown on the drawing.

Commenting Organization: Ohio EPA

Commentator: DSW

Section #: 3.4.5

Pg. #: 3-9

Line #: 29-30

Code: C

Original Comment #: 16

Comment: Please provide more detail on the grading. Rather than "grade to drain", it is preferred to retain some water retaining capacity to create a shallow pool, referred to as a vernal pool. It is recommended that the site Natural Resources group be consulted for grading recommendations here.

Response: Agree. The grading plan for the SWU does include the retention of surface water runoff and flood water from Paddys Run in a significant portion of the project area. While water may be lost to the aquifer in some depressions, it is anticipated that wetland habitat can be created in the footprint of Basin 1. As noted above, close coordination with the Natural Resources group and NRTs will be maintained throughout the planning process.

Action: The Natural Resources group will provide assistance for additional grading details particularly in the vicinity of the Equipment Wash Facility. Continue to work with Natural Resource group, DOE and NRTs to identify opportunities to create vernal pool and wetland features during construction. The SWU Conceptual Restoration Grading Plan (Drawing 92X-5500-G-0231) will subsequently be revised.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: 3.4.7

Pg. #: 3-11

Line #: 1-4

Code: C

Original Comment #: 17

Comment: Actions to be taken following the 6-inch scrape are not explicitly stated. Ohio EPA expects that visual observation will drive any additional excavation in association with real time scans off all areas.

Response: Agree.

Action: As stated in response to OEPA Comment No. 12, a WAO representative will be present during all excavation activities.

DRAWINGS

Commenting Organization: Ohio EPA

Commentator: DSW

Section #: Drawing 92X-5500-X-02030

Pg. #: NA

Line #: EWF

Code: C

Original Comment #: 18

Comment: Please provide detail on the installation and use of silt fence. Silt fence is not shown on Drawing 92X-5500-G-02033, nor is direction of surface water flow. The reason for installation of silt fence along Ditch 14 is not clear. If it is to prevent runoff, then a berm is preferable as the use of a silt fence to direct flow can cause undercutting of the silt fence through erosion at the base of the silt fence.

Response: The silt fence installation detail can be found on Drawing 92X-5500-G-02032. Locations for silt fence will be shown on Drawing 92X-5500-G-02033 for Part Two of the utility removal and remediation excavation as well as the direction of surface water flow. The purpose of installing silt fence along Ditch 14 is to intercept any storm water runoff from the concrete removal and excavation at the Equipment Wash Facility footprint during its remediation. This storm water runoff will eventually enter Ditch 14 and discharge directly to Paddys Run. With other Part Two excavations, storm water runoff will be directed to Basin 2 or Basin 4, which will act as sediment traps. Additionally, Note 2 of Drawing 92X-5500-G-02033 allows the Construction Manager to direct installation of silt fence conditions develop.

Action: Drawing 92X-5500-G-02033 will be revised to show surface water flow directional arrows and silt fence locations.

Commenting Organization: Ohio EPA

Commentator: DSW

Section #: Drawing 92X-5500-X-02030

Pg. #: NA

Line #: Basin 4

Code: C

Original Comment #: 19

Comment: Please provide more detail on the installation and use of silt fence. Silt fence is not shown on Drawing 92X-5500-G-02027, nor is direction of surface water flow. The reason for installation of silt fence around Basin 4 is not clear without showing surface water flow. If it is to prevent runoff, then a berm is preferable as the use of a silt fence to direct flow can cause undercutting of the silt fence through erosion at the base of the silt fence.

Response: The silt fence installation detail can be found on Drawing 92X-5500-G-02032. Locations for silt fence are presently shown on Drawing 92X-5500-G-02030 for Part One of the utility removal and remediation excavation as well as the direction of surface

water flow. Note 5 of Drawing 92X-5500-G-02033 allows the Construction Manager to direct installation of additional silt fence as field conditions change.

Action: Drawing 92X-5500-G-02030 will be revised to clarify surface water flow arrows and silt fence locations.

Commenting Organization: Ohio EPA
Section #: Drawing 92X-5500-X-02033 Pg. #: NA Line #: NA Commentator: OFFO
Original Comment #: 20 Code: C

Comment: The drawing appears to show the transfer line for water from the Basins to the Stormwater Retention Basins (SWRBs) are being left in place. This line should be removed following the removal of Basin 2. Due to the amount of items on the drawings and confusion of the proposed sequencing of work, an additional drawing showing just utilities/piping/features proposed to be left following completion of the project should be included.

Response: Correct. The transfer line for water from the Basins to the SWRBs will remain in place due to its proximity to tow lines remaining in operation to support the well extractions. The transfer line will be removed as part of the common trench, along with the other lines left remaining after this scope, when well extractions are complete.

Action: Clarification will be made within the IRDP as to the reasoning behind leaving the transfer line in place.

TECHNICAL SPECIFICATIONS

Commenting Organization: Ohio EPA
Section #: Technical Specification Package Pg. #: NA Line #: NA Commentator: DSW/OFFO
Original Comment #: 21 Code: C

Comment: This package does not contain 02270 which is referenced in the drawings (e.g., 92X-5500-X-02030). The package should include the most recent seeding and erosion control specifications. Specifically those specs requiring the use of matting on slopes and the seeding mixes for wet and upland areas.

Response: The comment warrants a two-part response. First, the contractor who would perform this activity is currently bound by contract to perform work in accordance with OSDF Phase III Technical Specification Section 02270 for Surface Water Management and Erosion Control. Therefore, Drawing 92X-5500-X-02030, Specification and Excavation Notes, references Section 02270 and adds any requirements necessary to perform this scope. Section 02270 was not bound with the Technical Specification for A2PI NWU Perimeter Area Remediation (Document No. 20430-TS-0001) so that it could continue to be controlled by the appropriate design organization, OSDF.

Similarly, seeding activities under this scope are bound by OSDF Phase III Technical Specification Section 02930, Vegetation. Seeding is to be performed by Wise Construction, and is therefore not addressed in the design package covering IT's scope.

Action: Prior to issuance of the construction traveler package directing Wise to perform seeding, Fluor Fernald Natural Resources will be consulted to ensure that the latest site seeding standard is used.

Commenting Organization: Ohio EPA

Commentator: OFFO

Section #: Technical Specs. 02205 Pckg.

Pg. #: 2-2

Line #: NA

Code: C

Original Comment #: 22

Comment: Ohio EPA does not concur with DOE's assertion that the riprap located in Paddys Run from the original removal action is non-impacted. The riprap was installed due to waste materials falling into Paddys Run. The soil behind the riprap was not certified prior to installation and no geofabric was installed. Therefore we believe at a minimum, the first layer of riprap which is in direct contact with soil should be dispositioned as impacted. And, a field call, depending on the penetration of soils and waste materials in the area, should be used to determine the disposition of the rest of the materials. Without this type of disposition approach, sampling will be necessary to determine if the material is non-impacted.

Response: As agreed upon during the NRT Meeting on May 31, 2001, the first layer of riprap which is in direct contact with the soil will be defined as impacted. This layer will be defined in the field as being no less than 3 feet wide from the riprap contact with the soil. Although flyash or debris was not evident in the 1993 video record showing the installation of the riprap against the east Paddys Run bank, field observation and determination between DOE and the Agencies (similar to what was successfully conducted in 2000 with the A2PI Carolina Area remediation) will be necessary should impacted material be visually determined extending beyond this 3-foot width.

Action: Specification 02205 will be clarified to reflect the 3-foot minimum width of riprap that is impacted. The Agencies will be notified prior to excavation into the riprap to allow for their presence in the field and assistance for field determination of additional impacted material.