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SUBMITTAL OF THE FINAL OPERABLE UNIT 3 REMEDIAL DESIGN PRIORITIZATION AND SEQUENCING REPORT (INCLUDES RESPONSES TO USEPA COMMENTS)

06/09/95

DOE-1071-95
DOE-FN EPAS
18
RESPONSES

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JUN 01 1995

DOE-1071-95

Mr. James A. Saric, Remedial Project Director
U.S. Environmental Protection Agency
Region V - 5HRE-8J
77 W. Jackson Boulevard
Chicago, Illinois 60604-3590

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

Dear Mr. Saric and Mr. Schneider:

SUBMITTAL OF THE FINAL OPERABLE UNIT 3 REMEDIAL DESIGN PRIORITIZATION AND SEQUENCING REPORT

The purpose of this letter is to submit the final Operable Unit 3 (OU3) Remedial Design Prioritization and Sequencing Report (PSR) to the U.S. Environmental Protection Agency (U.S. EPA) and Ohio Environmental Protection Agency (OEPA). The U.S. EPA approved the draft PSR on May 10, 1995, with three comments. Similarly, the OEPA submitted eighteen comments on April 17, 1995. Responses to these comments are also enclosed.

The schedule presented in the PSR is based on the assumptions that future funding for the Fernald site will remain at or near Fiscal Year 1995 levels. The Department of Energy, Fernald Area Office (DOE-FN) understands the EPAs concern about the issue raised in the transmittal letter day May 10, 1995, regarding the appearance of extending the estimated 16-year OU3, interim Record of Decision (IROD) schedule to a 30-year PSR schedule based on available funding. The DOE-FN is making every possible attempt to acquire additional funding for OU3 activities to accelerate the PSR schedule. If funding levels change, any resulting schedule updates will be submitted to the regulatory agencies for approval.

If you have any questions, please contact Anand Shah at (513) 648-3146.

Sincerely,

Johnny Reising

for Jack R. Craig
Fernald Remedial Action
Project Manager

FN:Shah

Enclosure: As Stated

Recycled and Recyclable

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Attachment 1

Responses to USEPA Comments on the Draft OU3 RD Prioritization and Sequencing Report

General Comment

The report describes the scheduling constraints and considerations used in developing the interim remedial action sequence and schedule. However, integrating Operable Unit 3 (OU3) activities with the OU5 schedule for remediation of contaminated soils and groundwater is not discussed in the report. This is an important consideration mentioned in the OU3 Remedial Design/Remedial Action (RD/RA) Work Plan dated March 1995 and should therefore be detailed in this report.

Response to General Comment

It is agreed that the integration of OU3 activities with the OU5 soil remediation schedule is an important consideration for the development of the OU3 base schedule. However, an OU5 schedule for remediation of soils in the former Production Area is not yet available. In lieu of an OU5 schedule, the OU3 base remediation schedule was developed using the most current information available from on-going OU5 RD/RA planning activities. Although a specific OU5 schedule is not discussed in the PSR, the major OU5 activities which require integration have been considered. Section 4.2 describes the three primary drivers considered during the development of the OU3 dismantlement sequence: the proposed On-Property Disposal Facility; the site surface and subsurface hydrology; and the need to remove OU3 structures to allow access for contaminated soil remediation in the former Production Area.

As currently envisioned, soils within the former Production Area will be scheduled for remediation after other FEMP contaminated soils. During the development of the OU3 base remediation schedule, this approach was factored into the scheduling of above-grade dismantlement so that large areas of land will be made available for at- and below-grade remediation projects at a given time.

In the absence of OU5 soil remediation schedules, the pace for structural dismantlement, as discussed in Section 4.2, is currently driven by anticipated funding levels. In the event that the scheduling of OU5 soil remediation impacts the scheduling of dismantling structures under the OU3 interim remedial action, the OU3 base remediation schedule would be appropriately modified.

Responses to USEPA Comments on the Draft OU3 RD Prioritization and Sequencing Report

Specific Comment #1

Section 4.1, Page 4-8, Table 4-1. The scheduling constraints and considerations for the Sewage Treatment Plant Complex are discussed in this section. The Sewage Treatment Plant lies in the potential path of the On-Property Disposal Facility; however, the Sewage Treatment Plant is not needed after October 1998 and the complex is not scheduled for remedial action until fiscal year (FY) 2023. The rationale for this schedule should be explained in the report.

Response to Specific Comment #1

Figure 4-1 shows the potentially acceptable region in which the proposed On-Property Disposal Facility can be placed. As the figure shows, a small portion of the Sewage Treatment Plant is in this region. However, the remediation of the Sewage Treatment Plant has not been placed as a high scheduling priority for several reasons.

As stated in Table 4-1, the Sewage Treatment Plant Complex has a high potential for above-grade and below-grade remediation to be integrated with OU5 soil remediation as a single project because some of the components, like the Trickling Filters (25H), are above-grade, but are surrounded by soil berms. Also, the Sewage Treatment Plant Complex is a comparatively small complex, both in construction duration and project cost, and it would be economically more beneficial if both above-grade and below-grade remediation would be combined into an integrated remediation project. This integrated remediation approach would be driven primarily by OU5 soil remediation schedules, assuming available funding.

The base schedule has been developed using the most current information available from on-going OU2 remedial design activities. Until the placement of the On-Property Disposal Facility has been determined, it has been assumed that the Sewage Treatment Plant will not be affected by the construction of the facility, at least in the near term. Cell construction is currently envisioned to be a north to south progression, with southern cell phases coming later to coincide with soil and debris generation.

Also, because the remediation cost for the complex is comparatively small, its remediation may be readily accelerated with little to no impact on the rest of the base schedule. In the event that OU2 remedial design activities determine that the Sewage Treatment Plant

Complex would hinder the construction of the On-Property Disposal Facility, the OU3 base remediation schedule would be appropriately modified.

Specific Comment #2

Section 4.2, Page 4-16, Figure 4-3. The base schedule for the OU3 interim remedial action is presented in this figure. Remedial action construction is postponed until all safe shutdown activities are completed in FY 2001. It may be advisable to begin with remedial action at complexes that are in the potential path of the on-property disposal facility and are available for remediation prior to FY 2001. The Department of Energy should consider changes to the base schedule that will accelerate the interim remedial actions in light of OU5 requirements and other constraints listed in Table 4-1.

Response to Specific Comment #2

As stated above, the base schedule has been developed using the most current information. Although, the on-going OU2 remedial design efforts emphasize optimum geological conditions in siting the On-Property Disposal Facility, implementability is also a consideration, especially in regard to the OU3 base remediation schedule. In the event that the scheduling of remedial action activities for other operable units impacts the scheduling of dismantling structures under the OU3 interim remedial action, the OU3 base remediation schedule would be appropriately modified.

Initial siting concepts indicated the potential for the On-Property Disposal Facility to be constructed over the northwest portion of the former Production Area. At the publication time of the final PSR, that plan was under revision and no significant overlap into the former Production Area was anticipated.

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Responses to Ohio EPA Comments on the Draft OU3 RD Prioritization and Sequencing Report

Comment #1

Section 2.3, Page 2-7, Lines 4-14. Line 5 indicates that active and inactive HWMU closures will be accomplished through implementation of response actions under the CERCLA process. Later in this paragraph, closure of active HWMUs are proposed through RCRA processes. Table 3-3 indicates a combination of RCRA/CERCLA integrated processes. Clarification of the responsible regulatory mechanisms should be made.

Response #1

The nineteen inactive HWMUs and seven active HWMUs discussed in this paragraph (and listed in Table 3-3) will be remediated under the OU3 interim action (a CERCLA response action), as discussed in Section 3.6.3.4 of the approved OU3 RD/RA Work Plan. The substantive closure requirements of RCRA will be considered ARARs for this CERCLA response action. The text has been modified for clarification.

Also note that there are eighteen HWMUs to be closed under RCRA per the DF&O currently being negotiated. These eighteen HWMUs are listed and discussed in Section 3.6.3.3 of the OU3 RD/RA Work Plan.

Comment #2

Section 3, General. Three criteria were cited for the assembly of components into complexes for remediation: (1) location and logistics; (2) current and/or future use of the facility; and (3) availability of the components for remediation. Only examples of the component criteria are listed, fuller documentation is not presented. Therefore, no review of the Complex categorization can be made.

Response #2

Understood. The process of assembling OU3 components into remediation complexes took months of iterative discussion using a team of representatives from DOE and various FERMCO departments. Examples were used in the text in order to streamline this discussion. In addition to the examples in Section 3, more detailed, complex-specific documentation has been added to Appendix C.

Responses to Ohio EPA Comments on the Draft OU3 RD Prioritization and Sequencing Report

Comment #3

Section 3.0, Page 3-1, Lines 12-27. This section lists several components that either have been, or are still to be removed under existing removal actions. If the components have already been removed, please include the date, and if they are still to be removed, please list the date removal actions are to begin.

Response #3

The discussion on page 3-1 that lists the removal actions and the associated components that have been removed has been modified to include the dates that the field activities were completed and the dates of the submittals of the removal action close-out reports. The timing for the disposition of non-RCRA drums (G-009), RCRA drums (G-010), inventory (G-011), and mobile containers (G-012) under Removal Nos. 9 and 12 is shown in Appendix A. The following table replaces the removal action list on page 3-1.

OU3 Components Remediated Under Removal Actions

Removal Number	Removal Action Title	Remediated Components	Field Activities Completed	Submittal of Final Report
7	Plant 1 Pad Continuing Release Stage III	TS-001, TS-002, TS-003	7/21/94 (1)	2/19/95
9	Removal of Waste Inventories	G-009, G-010, G-012	Ongoing	
12	Safe Shutdown	G-011	Ongoing	
13	Plant 1 Ore Silos	1C	11/18/94	12/19/95 (2)
15	Scrap Metal Piles			
	Phase I	P-006	9/30/93	10/04/94
	Phase IIB	P-004	Ongoing	
19	Plant 7 Dismantling	4C, 7A, 7C	11/18/94	10/31/95 (2)
28	Contamination at the Fire Training Facility	73A, 73B, 73C, 73D, 73E	5/9/95	7/30/95 (2)

(1) This reflects the date that the dismantlement of the tension support structures was completed, rather than the date that all field activities under Stage III of Removal No. 7 were completed.

(2) These dates reflect anticipated future submittal dates as presented in the respective removal action work plans.

Responses to Ohio EPA Comments on the Draft OU3 RD Prioritization and Sequencing Report

Comment #4

Table 3-1, Page 3-3, Lines 11-25. Please explain why the Pilot Plant Complex is currently unavailable for dismantlement. Table 4-1 indicates that the Pilot Plant Complex could be dismantled once the thorium nitrate inventory was remediated. This should be achievable in the near future, as the thorium nitrate inventory should be remediated shortly after the UNH inventory has been neutralized. Also, prior to recent budget impacts, the Pilot Plant was one of the next two buildings to be dismantled. The Ohio EPA believes that the Pilot Plant should be re-evaluated and given a higher priority for removal.

Response #4

Components within the Pilot Plant Complex were not included in Table 3-1 because of the thorium nitrate inventory. Although it is expected that thorium nitrate treatment will begin in FY-95, this is not the primary issue affecting the decision to place the Pilot Plant Complex in a later part of the optimal remediation sequence.

As discussed in Section 4.1, the development of the dismantlement sequence focused primarily on the need to clear an upgradient area to support OU5 soil remediation and to accommodate the potential On-Property Disposal Facility. The Pilot Plant Complex was not considered a high priority because it does not satisfy either of these drivers. The initial push to remediate it early was based on anticipated availability of funds and the ready availability of most of the Pilot Plant Complex for decontamination and dismantlement. These plans have been altered as a result of budget recisions and re-prioritization of decontamination and dismantlement with regard to other remediation planned for the FEMP.

The proposed sequence of structure dismantlement is based on the assumption that, following removal actions, HWMU closures, and Safe Shutdown activities, the bulk of the threat would be mitigated. The Pilot Plant Complex is identified early in the Safe Shutdown schedule; task orders and work plans are currently being prepared. In the event that the Pilot Plant Complex (or any other complex) would still pose an imminent threat to human health or the environment after completion of these actions, the remediation of complexes would be re-prioritized and the revised base schedule would be submitted to EPA for approval.

Comment #5

Section 3.0, Page 3-5, Line 19. The line states that 23 above-grade complexes were created from OU3 components. However, Table 3-2 and Table 4-1 only identify the same 21 complexes, and the un-numbered Z-folded map includes all of the components listed in Table 3-2 with one additional complex, Grade and Below-Grade Components. Note that in Table 3-3 the At- and Below-Grade is divided into Central, South, and North. This apparent discrepancy requires resolution.

Response #5

Agreed. The reference to 23 complexes on page 3-5 has been corrected to 21 above-grade complexes. For clarification, the title of Table 3-2 has been changed to "Definitions of Above-Grade Complexes." In addition to the 21 above-grade complexes, there is one combined below-grade complex that will be scheduled as part of the OU5 RD/RA process. This below-grade complex was initially divided into three parts (i.e., North, Central, and South) for internal site-wide planning purposes only. Since below-grade remediation will be planned and coordinated during the OU5 RD/RA process and may not be remediated in three parts, all references to dividing below-grade components into distinct projects have been removed from the final PSR.

Comment #6

Table 4-1, Page 4-6. Pilot Plant Complex - Please see Comment #4 above.

Response #6

See the response to Ohio EPA Comment #4.

Comment #7

Table 4-3, Page 4-19. Table 3-1, page 3-3, lists several OU3 components currently available for remediation, yet Table 4-3 shows that no further dismantlement of OU3 components will take place until the year 2000 once Building 4A has been removed, nearly a five-year lull in D&D activities. DOE should include a discussion related to expediting OU3 component removal should additional, unexpected funding be obtained.

Responses to Ohio EPA Comments on the Draft OU3 RD Prioritization and Sequencing Report

Response #7

Agreed. The following paragraph has been added to the Section 5.0 discussion regarding potential schedule updates:

"The most likely cause for a schedule revision would be a change in the projected funding levels used to develop the base schedule. As discussed in Section 4.2, since the budget for the remediation of the FEMP is approved by the U.S. Congress annually and prioritized at the FEMP for optimal risk reduction, the planned funding for decontamination and dismantlement projects in the out-years can only be based on current projections. The base schedule has been developed using these projections, resulting in anticipated annual funding of no more than $10 million throughout the interim remedial action. In the event that additional, unexpected funding for OU3 remediation is obtained, the base schedule will be accelerated accordingly and submitted for regulatory approval."

Comment #8

Section 5.0, Page 5-1, Lines 1-11. The Ohio EPA recommends that the base schedule be updated annually as stated in the approved OU3 RD/RA Work Plan since more definitive budget numbers should be known each year, thus providing the means for a more conclusive base schedule.

Response #8

The annual submittal of a five-year schedule, as discussed in Section 6.1 of the OU3 RD/RA Work Plan, was based on the initial approach that the five-year schedule would be developed using projected budget estimates and that project milestones would, therefore, be negotiated annually. However, in order to provide USEPA and OEPA with milestones for the entire OU3 interim remedial action, the base schedule was not developed for only the first five years. Therefore, the PSR proposes that the base schedule be updated when necessary (rather than annually) and submitted to the regulatory agencies for review and approval.

USEPA responded to this approach with the following: "The RD/RA work plan was reviewed and approved by U.S. EPA knowing that the PSR document would define the schedules for

submittal of implementation plans for the various components in OU3, based on a facility utilization strategy. Once the PSR is approved the associated schedules become final and enforceable under the 1991 Amended Consent Agreement. U.S. DOE is not required to submit an annual PSR." (James A. Saric to Jack R. Craig, "Phase VI Removal Actions," March 8, 1995).

Comment #9

Section A.2.1, Page A-6, Table A.2-1. Reported above-grade unbulked volume estimates for OU3 RD/RA Categories B, H, K, P and Totals do not coincide with the final cumulative generation rates presented in Figures A.2-2, A.2-7, A.2-10, A.2-13, and A.2-14, respectively. The report values are:

Waste Category	*Table A.2-1 (CF)*	*Final Cumulative Generation in Figures (CF)*
B	*1,398,300*	*107,000*
H	*100*	*47*
K	*57,800*	*43,000*
P	*32,200*	*24,000*
Total	*3,903,900*	*2,700,000*

Furthermore, a discrepancy occurs between the reported total volume of OU3 interim remedial action above-grade hazardous and/or mixed wastes between Figure A.2-15 (52,000 CF) and in the text on page A-7, line 13 (81,300 CF).

Response #9

Table A.2-1 lists the unbulked volumes for all OU3 interim action materials, segregated into the seventeen OU3 RD/RA material categories. However, as discussed in Section A.2.1 of the draft PSR, materials generated from the remediation of the Miscellaneous Complex have not been included in the Material Balance Model because the Miscellaneous Complex is expected to be remediated over the course of the OU3 interim action. Since the material generation rates for the Miscellaneous Complex cannot be accurately predicted, none of the Appendix A generation figures included the 1,286,000 cubic feet of unbulked materials

associated with the Miscellaneous Complex. On pages A-7 and A-23, the text states "the exclusion of these materials from the Material Balance Model accounts for the discrepancies between the above-grade volumes shown in Table A.2-1 and the following interim action material generation figures, especially construction debris (Category B), non-process piping (Category K), and regulated/friable ACM (Category P)." Similarly, this also accounts for the discrepancy between the mixed waste estimate stated in the text and Figure A.2-15. To avoid further confusion, the final PSR has incorporated materials associated with the Miscellaneous Complex into the Material Balance Model by assuming a linear generation rate of these materials, starting in FY-01 (to coincide with the start of the External Complex) and ending in FY-25 (to coincide with the completion of the Administration Complex).

Also, it should be noted that Table B-1 in the draft PSR incorrectly listed the bulked volumes, rather than the unbulked volumes, for Process Trailers (G-006) and Non-Process Trailers (G-007). This resulted in a material overestimate of approximately 878,000 cubic feet. This overestimate of material did not affect the interim storage capabilities or the conclusions stated in the PSR. Appendices A and B of the final PSR have been modified to include the appropriate volumes.

As shown in Table B-1, the estimated OU3 quantity of specialty metals (Category H) is 49 cubic feet unbulked, which agrees with Figure A.2-7. Since Table A.2-1 is a summary table, material volume estimates have been rounded. As a result, Table A.2-1 lists the estimated unbulked volume of specialty metals to be 100 cubic feet.

Comment #10

Section A.2.3, Page A-28, Line 23. The statement is made that sludges resulting from the AWWT treatment of perched waters will be dispositioned into the OU5 On-Property Disposal Facility. Please include a statement which says that the sludge must meet the WAC for the disposal cell in order for disposition to occur on-site.

Response #10

Agreed. The text has been changed, as requested, to read: "It is anticipated that the sludges resulting from the AWWT treatment of perched waters will be dispositioned into the On-Property Disposal Facility as they are generated, providing they meet the on-property WAC."

Comment #11

Table A.2-3, Page A-34, Line 16. Removal Action #19, Plant 7 Dismantling - More definitive volume numbers should be available from this removal action since it is nearly, if not already, completed. Please modify this table using the exact volume numbers from Plant 7 if they are currently known.

Response #11

The table on the following page summarizes the material volumes generated during Removal No. 19. As discussed in Appendix A, materials generated/containerized before FY-95 (i.e., before October 1, 1994) are referred to as "existing material" and are included in volume estimates for Removal Nos. 9 and 12. Please note that, as with all volume estimates in Section A.2.3, segregation of materials into FY-94 and FY-95 is based on the date that the material packaging information was entered into the Site-Wide Waste Information, Forecasting, and Tracking System (SWIFTS), not necessarily the actual date of material generation. Updated volumes for Removal No. 19 materials generated/containerized during FY-95 have been included in Table A.2-3 of the final PSR.

Material Volumes Generated During Removal No. 19

OU3 RD/RA Category	Material Type Description	Unbulked Volume (in cubic feet) FY-94	FY-95	Total
B	Construction Debris	2,913	10,681	13,594
D	Transite	767	1,733	2,500
E	Residues, Hold-Up Material, and Sludges	164	7	171
F	Masonry, Concrete, Asphalt	639	560	1,199
H	Specialty Metals	0	27	27
I	Restricted Use Metals	0	5,876	5,876
N	Unrestricted Use Metals	0	2,815	2,815
P	Friable Asbestos	769	103	872
	Total Material Generated	5,252	21,802	27,054

Comment #12

Section A.2.4, Page A-38, Table A.2-4. The total annual generation of other materials is reported to be 80,700 CF, unbulked. However, in Figure A.2-19, this same volume is reported as approximately 807,000 CF, an order of magnitude difference.

Response #12

The annual generation of other materials is 68,100 cubic feet. However, every fourth year the sludge from the Storm Water Retention Basins is dredged, adding another 12,600 cubic feet (totalling 80,700 cubic feet). Table A.2-4 has been modified to give both totals. The bottom graph of Figure A.2-19 reports a cumulative generation of 855,000 cubic feet over twelve years.

Comment #13

Section A.2.5, Page A-38. Figure A.2-20 shows the final anticipated annual and cumulative generation for all FEMP materials. This figure was created through the superposition of several figures, including Figure A.2-14 and A.2-19, which may have discrepancies as noted

above. The validity of the values in Figure A.2-20 should be reexamined in light of these comments. If these model inputs are changed, then a model rerun, complete with updated results and conclusions throughout the rest of the report would be indicated.

Response #13

Agreed. The Material Balance Model has been rerun based on comments received and the updated volume estimates. Appendix A of the final PSR reflects these changes.

Comment #14

Section A.3, Page A-43, Line 22. Material bulking factors were presented in Table A.3-1 without references. Some of the bulking factors seem low. Specifically, the soil bulking factor of 1.00 may be unrealistic.

Response #14

The material bulking factors presented in Table A.3-1 were initially researched during the development of the OU3 Proposed Plan/Environmental Assessment for Interim Remedial Action. The bulking factors were determined using a combination of industry standards, vendor data, engineering judgement, and FEMP waste handling experience. They are currently being refined to support the development of the OU3 RI/FS Report and will be discussed further in that report. For example, the bulking factor for unrestricted use metals (OU3 RD/RA Material Category N) has changed from 23.7 to 16.7 based on data generated during the containerization of structural steel from Plant 7. Similarly, the Material Balance Model will be revised, as necessary, as refined material bulking factors are generated.

As discussed in the first paragraph of Section A.2.1, at- and below-grade materials (e.g., soils) are not included in the Material Balance Model because they will be dispositioned as they are generated and will not require temporary storage. Because of this, the soil bulking factor of 1.00 was included in Table A.3-1 only because it was used in the Material Balance Model as a mathematical place-holder. A soil bulking factor of 1.25 is currently being used for OU5 design efforts and, therefore, has been added to Table A.3-1. However, this change will not affect the results of the Material Balance Model.

**Responses to Ohio EPA Comments on the
Draft OU3 RD Prioritization and Sequencing Report**

Comment #15

Section A.3.3, Page A-47. The cumulative generation and shipment of LLW to NTS is estimated to be 5,200,000 CF (Figure A.3-3). The cumulative volume of generation of all material during the OU3 interim remedial action is estimated at 26,000,000 CF (Figure A.3-5). This more than doubles the OU3 IROD criteria listed on page 2-8, line 28, limiting the volume of off-property disposition to a maximum of ten percent. DOE will need to ensure that the final OU3 ROD addresses this change in off-property disposition percentage.

Response #15

The following paragraph is an excerpt from page 18 of the approved IROD: "To prevent constraints on the decontamination and dismantlement action due to storage space limitations for the resulting construction debris, a limited quantity of wastes would be shipped off-site for disposition. A maximum of 10 percent of all remediation wastes generated by implementing Alternative 3 (42,500 cubic yards as calculated from Table 5-1) would potentially be shipped off-site for disposition and recycling prior to the final disposition decision being determined by the final remedial action ROD for the majority of wastes in OU3. The 10 percent limitation on waste volumes allowed to be dispositioned off-site refers to 10 percent of the total OU3 volume of remediation wastes generated; this was chosen as a limit which would assure that a final disposition decision would not be biased by this action."

Off-site disposition of materials is only limited until the issuance of the final remedial action ROD, not for the entire interim action. In addition, the ten percent restriction is only for OU3 materials remediated under the interim action; Figure A.3-3 represents the off-site disposition of much more than OU3 interim action materials. Based on the draft base schedule presented in Figure 4-3, approximately 115,000 cubic feet (out of a total of 7,092,000 cubic feet) would be remediated before the issuance of the final remedial action ROD, which is only 1.6 percent of the total material to be remediated under the OU3 interim action.

Comment #16

Section A.3.6, Page A-51, Figure A.3-5. The differences between Figure A.3-5 and A.2-20 are unclear in the text.

Response #16

There should not have been any differences between the material generation curves in the two figures. The minor discrepancies between the two generation curves in the draft PSR have been corrected in the final PSR. Figure A.2-20 is used to show the total material generation rate for the FEMP. Figure A.3-5 is used to show the relationship between the shipment rate and the generation rate in the first several years of remediation; this difference is caused by the reduction of existing waste currently in storage.

Comment #17

Figure A.4-1, Page A-54. RA-28 lists soils as being in the uncovered storage category. Contaminated soil piles should be covered with, at a minimum, a tarpaulin or other material in order to prevent runoff.

Response #17

The intent of the uncovered storage category is to consider the use of storage locations that are not structurally covered, such as concrete pads. This was not to imply that soil piles would be exposed to the environment. All bulk storage will be managed under the guidelines established for Removal No. 17 (Improved Storage of Soil and Debris). The reference to "piles" in Figure A.4-1 has been changed to "controlled piles."

Comment #18

Section A.5.1, Page A-61, Line 4. OAC 3754-66 should be changed to OAC 3745-66.

Response #18

Agreed. The text has been changed accordingly.