

OPERABLE UNIT 3

INTEGRATED REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN



SECTIONS 1-7, APPENDICES A through F

FEBRUARY 2005

FERNALD CLOSURE PROJECT
FERNALD, OHIO

U. S. DEPARTMENT OF ENERGY
FERNALD AREA OFFICE

FINAL

Document Control No. 2503-WP-0023 (REV. 0) PCN8

RECORD OF REVISIONS
OPERABLE UNIT 3 REMEDIAL DESIGN/REMEDIAL ACTION WORK PLAN
2503-WP-0023, REV. 0

REVISION	PCN	DATE	PURPOSE
0	N/A	June 1997	Initial issuance of Revision 0 Operable Unit 3 Integrated Remedial Design/Remedial Action Work Plan (2503-WP-0023)
0	1	March 1998	Amendment to OU3 Integrated RD/RA Work Plan regulatory milestones; pp. 6-3/6-4 and pp.6-7/6-8.
0	2	July 1998	Amendment to OU3 Integrated RD/RA Work Plan for placement of transite panels in the OSDF; p.3-60. (to reflect that transite panels will not be size reduced before disposal in the OSDF and to clarify the fact that transite panels will generally be packaged in 1.5-foot bundles, but those bundles may be stacked to a maximum height of four feet if desired by the OSDF contractor.
0	3	December 1998	Amendment to OU3 Integrated RD/RA Work Plan regulatory milestones; pp. 6-3/6-4 and 6-7/6-8 (resulting from Plant 1 Pad Consolidation Change Proposal).
0	4	June 1999	Amendment to OU3 Integrated RD/RA Work Plan regulatory milestones; pp 6-3/6-4 and 6-7/6-8 (resulting from Nuclear Materials Dispositioning Milestones/Extension, USEPA letter dated June 9, 1999).
0	5	February 2003	Amendment to OU3 Integrated RD/RA Work Plan regulatory milestones; pp. 6-3/6-4, 6-7/6-8 and complex remediation sequence p. 2-15/2-16 (resulting from the addition of Miscellaneous Small Structures Phase II D&D activities and revision of completed D&D activities to date).
0	6	April 2003	Amendment to OU3 Integrated RD/RA Work Plan regulatory milestones; pp. 6-3/6-4 and 6-7/6-8 (resulting from the combination of OU4 Phase I and Phase II into one D&D activity and the revised submittal date of May 28, 2004 for the OU4 Implementation Plan).
0	7	April 2004	Amendment to OU3 Integrated RD/RA Work Plan regulatory milestones; pp. 2-15/2-16, 6-3/6-4 and 6-7/6-8 (resulting from the creation of separate OU4 D&D Implementation Plans for Silo 3 D&D activity and the Silos 1 & 2 D&D activity. Revised submittal dates of July 9, 2004 and December 16, 2004 for the OU4 Silo 3 and Silos 1 & 2 Implementation Plans respectively).
0	8	February 2005	Amendment to OU3 Integrated RD/RA Work Plan regulatory milestones; pp. 2-15/2-16, 6-3/6-4 and 6-7/6-8. The amendment incorporates the addition of the Advanced Wastewater Treatment (AWWT) Facility as a complex scheduled for decontamination and dismantlement (D&D).

TABLE 2-4 Complex Remediation Sequence

Remediation Complex*	Components
Building 4A	4A
Plant 1 Complex – Phase 1	1A, 30B, 56B, 56C, 66, 67, 72, TS-007
High & Low Nitrate Tanks	18K, 18L
Boiler Plant/Water Plant Complex	10A, 10B, 10C, 10E, 20B, 20C, 24A
Thorium/Plant 9 Complex	9A, 9B, 9C, 9D, 9E, 9F, 32A, 32B, 69, 78, 81
Maintenance/Tank Farm Complex	12A, 12B, 12C, 12D, 19A, 19C, 19D, 19E, 20H, 64, 65
Plant 5 Complex	4B, 5A, 5B, 5C, 5D, 5E, 5G, 55A, 55B
Multi- Complex	2A, 2B, 2C, 2D, 2F, 3A, 3D, 3E, 3H, 3J, 3K, 3L, 8A, 8B, 8C, 8D, 8E, 8G, 8H, 18B, 18D, 18H, 20G, 22B, 22E, 22D, 26A, 26B, 28D, 39A, 45A, 80
Sewage Treatment Plant Complex	25A, 25B, 25E, 28F, 39D
Plant 6/East Warehouse Complex	6A, 6B, 6C, 6D, 6E, 6F, 6G, 20D, 77, 79, 82
Plant 1 Complex – Phase II	1B, 20A, 30A, 56A, 71, TS-004, TS-005, TS-006
Pilot Plant Complex	13A, 13B, 13C, 13D, 37, 54A, 54B, 54C
Administration Complex	11, 14A, 14B, 20K, 53A, 53B, 31A, 46
Laboratory Complex	15A, 15B, 15C, 68
OU1 Complex	18G, 91A, 91B, 91C, 91D, 91E, 91F, 91G, 91H, 91J, 91K
OU4 Complex – Silo 3	35B, 94H, 94M, 94N, 94P, 94Q
OU4 Complex – Silos 1 & 2	34A, 34B, 94A, 94B, 94C, 94D, 94E, 94G, 94J, 94K, 94L, 94R, G-008 Silos 1 & 2 bridge
Advanced Wastewater Treatment Complex	51A, 51B, 51C
Miscellaneous Small Structures	2E, 2G, 3B, 3C, 3F, 3G, 5F, 8F, 10D, 18M, 22A, 24B, 28A, 28B, 28N, 34C, 38A, 38B, 39B, 39C, 45B, 62, 63
Miscellaneous Small Structures – Phase II	12E, 12F, 12G, 16A, 16B, 16C, 16D, 16E, 16F, 16G, 16H, 16J, 16K, 16L, 16M, 16N, 16P, 18J, 18P, 18Q, 18R, 18U, 18Y, 18Z, 19B, 20E, 20F, 21A, 21C, 22C, 22G, 23A, 23B, 24C, 24D, 25C, 25J, 25K, 26C, 26D, 26E, 26F, 28E, 28G, 28H, 28J, 28K, 28L, 28M, 31B, 35A, 50, 52A, 52B, 60, 61, 82B, 93A, TS-008, TS-009, TS-010, TS-011, TS-012, TS-013, TS-014, G-007 Trailers and G-001 Railroad Tracks

*G-coded components such as utility lines, process and non-process trailers and pipe bridges will be dismantled according to availability status or association with the nearest remediation complex.

Gray-shaded components indicate demolition is complete.

A colored illustration of OU3 complexes are shown in Figure 2-2.

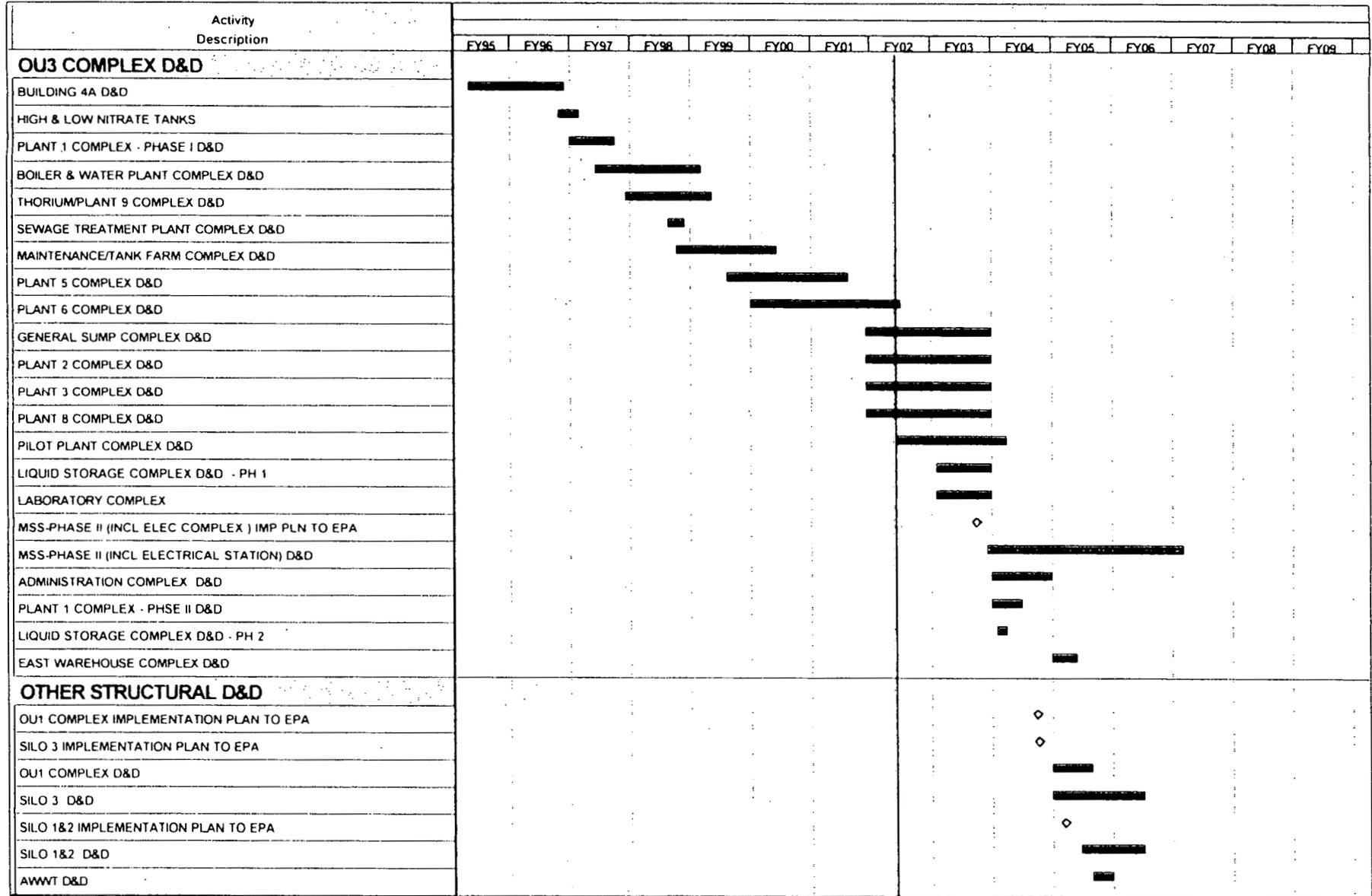
In addition to the prioritization and sequencing functions of the PSR, it also served as the mechanism for supplanting the OU3 Facility Utilization Report and for providing the regulatory agencies with any schedule updates. Sections 4.4 and 6 of this work plan incorporate those requirements into the OU3 integrated remedial action.

Since the PSR was updated and submitted to the regulatory agencies in August 1996, the component listing for several complexes have been further revised; however, the overall schedule for completion of OU3 remedial action was not revised. The major revision to the complex listing was the assignment of all components previously defined for the Miscellaneous Complex, except the general components ("G" coded), to appropriate complexes. The general components (e.g., railroad tracks, roads, pipe bridges, non-process trailers), cannot be assigned to individual OU3 complexes as whole entities due to their extensive distribution throughout the FEMP and, as a result, are still discussed as the Miscellaneous Complex. Since the Miscellaneous Complex serves only to reserve the "general" components in somewhat of a queue for future dismantlement, the complex will not be scheduled individually for remediation. The Miscellaneous Complex has therefore been removed from the complex remediation sequence. All components that comprise the Miscellaneous Complex will be remediated under one of the defined complexes. The above-referenced Miscellaneous Complex reassignments include: components 16H, 16J, 23, 25J, 28E, and 28G being placed in the Administration Complex; 18G being placed in the OU1 Complex; and 28D being placed in the Liquid Storage Complex. Other complexes revised include: P-005 (coal pile) will be removed for reuse; and since 28C was previously removed under an independent O&M activity (in 1991), it was deleted from the list.

2.6 Summary of the OU3 Record of Decision for Final Remedial Action

The OU3 Record of Decision for Final Remedial Action identified the selected remedy as the "Selected Material Treatment, On-Property Disposal, and Off-Site Disposition" of material generated by the OU3 interim remedial action and OU3 removal actions. Specifically, the OU3 Final Action ROD states that the OU3 selected remedy consists of the following elements:

- Provides for unrestricted/restricted release of materials, as economically feasible; for recycling, reuse, or disposal;
- Permits treatment of materials to meet the on-site disposal facility and/or off-site disposal facility waste acceptance criteria;
- Requires off-site disposal of process residues, waste product materials, and process-related metals;
- Requires off-site disposition of acid brick and concrete from specific locations and any other materials exceeding the OSDF WAC;
- Permits disposal of remaining OU3 wastes in the OSDF;



© Primavera Systems, Inc.	Start Date	25FEB02	[G:\FDP\Schedule\RDRA]	Sheet 1 of 1	█	Early Bar
	Finish Date	05DEC06			█	Progress Bar
	Data Date	25FEB02			█	Critical Activity
	Run Date	03FEB05 07:33				

REVISED FIGURE 6-1
BASELINE SCHEDULE
 FOR OPERABLE UNIT 3 DISMANTLEMENT

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TABLE 6-1 OU3 Remedial Design Regulatory Milestones

Complex	Implementation Plan Submittal Dates
Building 4A	19 Sep 94 ^(a)
Plant 1 Complex – Phase I	3 Nov 95 ^(a)
High and Low Nitrate Tanks	20 Feb 96 ^(a)
Boiler Plant/Water Plant Complex	12 Sept 96 ^(a)
Thorium/Plant 9 Complex	2 Jan 97 ^(a)
Tank Farm Complex ^(b)	27 Feb 98 ^(a)
Maintenance Complex ^(b)	27 Feb 98 ^(a)
Sewage Treatment Plant Complex	2 Mar 98 ^(a)
Plant 5 Complex	25 Jan 99 ^(a)
Plant 6 Complex ^(c)	30 Apr 99 ^(a)
East Warehouse Complex ^(c)	30 Apr 99 ^(a)
Pilot Plant Complex	24 May 01 ^(a)
Plant 3 Complex ^(e)	27 June 01 ^(a)
General Sump Complex ^(e)	27 June 01 ^(a)
Plant 2 Complex ^(e)	27 June 01 ^(a)
Plant 8 Complex ^(e)	27 June 01 ^(a)
Liquid Storage Complex ^(e)	27 June 01 ^(a)
Plant 1 Complex – Phase II	19 June 02 ^(a)
Administration Complex	19 Dec 01 ^(a)
Laboratory Complex	18 Apr 02 ^(a)
Electrical Complex ^(f)	5 Mar 03 ^(a)
OU4 Complex – Silo 3	9 July 04 ^(a)
OU4 Complex – Silos 1 & 2	16 Dec 04 ^(a)
OU1 Complex	3 July 04 ^(a)
<i>Miscellaneous Small Structures</i> ^(d)	30 Apr 98 ^(a)
Miscellaneous Small Structures - Phase II ^(f)	5 Mar 03 ^(a)
Advanced Wastewater Treatment Complex	31 Mar 05

- (a) actual submittal date
- (b) Maintenance Complex and Tank Farm Complex Have been combined into one project (i.e., Maintenance/Tank Farm Complex) and a single implementation plan was submitted for this combined complex.
- (c) Plant 6 Complex and East Warehouse Complex have been combined into one project (i.e., Plant 6/East Warehouse Complex) and a single implementation plan was submitted for this combined complex.
- (d) Miscellaneous Small Structures Implementation Plan was developed to efficiently decontaminate and dismantle smaller facilities and structures. Miscellaneous Small Structures has been added to this table in italics to indicate that the Implementation Plan submittal was not tied to an OU3 Remedial Design Regulatory Milestone.
- (e) Plant 3 Complex, General Sump Complex, Plant 2 Complex, Plant 8 Complex and Liquid Storage Complex have been combined into one project (i.e., Multi-Complex) and a single implementation plan was submitted for these five complexes.
- (f) Electrical Complex and Miscellaneous Small Structures - Phase II have been combined into one project (i.e., Miscellaneous Small Structures - Phase II) and a single implementation plan was submitted for this combination of complex and small structures.

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**THE ENCLOSED PAGES FROM THE RD/RA WORK PLAN HAVE BEEN UPDATED TO
REFLECT THE SUBMITTAL DATES REGULATORY MILESTONE CHANGE. PLEASE REPLACE
THE EXISTING PAGES WITH THESE ENCLOSED PAGES WHICH INCLUDE THE
FOLLOWING:**

COVER PAGE/RECORD OF REVISIONS

PAGE 2-15/2-16

PAGE 6-3/6-4

PAGE 6-7/6-8