

Miamisburg Closure Project
OU-1
Baseline Summary
June 2008

BACKGROUND

The Miamisburg Mound plant was built in the late 1940s to support research and development, testing, and production activities for DOE's defense nuclear weapons complex and energy research programs. The plant's mission involved production of components, which contained plutonium-238, polonium-210, tritium, and large quantities of high explosives. This mission continued until 1994, when these activities were transferred to other DOE facilities. In 1989, the Mound site was placed on the United States Environmental Protection Agency's National Priorities List.

Although a final Record of Decision was issued in 1995 for a former Mound landfill, Operable Unit One (OU-1), the City of Miamisburg remained concerned over the potential public health and reuse impacts of the remaining landfill. In response to these concerns, Congress provided \$30,000,000 and directed the DOE in November 2005 to take additional remedial actions at OU-1. It was decided to complete the ongoing Miamisburg Closure Contract and to accomplish this additional work under a separate contract.

The Miamisburg Closure Project contractor declared physical completion July 31, 2006, and DOE accepted completion of that scope in March 2007. A task order under an existing Indefinite Delivery, Indefinite Quantity contract was awarded in October 2006 for the OU-1 work.

SCOPE DESCRIPTION

The OU-1 Project consists of two distinct projects: the OU-1 Project and the Potential Release Site 441 (PRS 441) Project. The primary concern within the OU-1 area consists of residual contamination within a Site Sanitary Landfill that sits on top of an older Historic Waste Disposal Area. Congress has appropriated \$30M for this project. The goal of the PRS 441 (rail load out area) Project is to be compliant with the requirements defined by CERCLA as implemented by the Mound 2000 Work Plan. Funding for the PRS 441 Project scope is provided separately from the funding appropriated by Congress for the OU-1 Project scope.

End States and End Dates

The Miamisburg Closure Project contractor declared physical completion in July 2006, and DOE completed their physical acceptance review and declared physical acceptance in March 2007. The DOE Office of Legacy Management accepted custodianship of the site in October 2006. Transfer of this work scope for full operational responsibility for

the site in FY 2010 is pending final negotiations between EM and the Office of Legacy Management and completion of formal transfer documentation.

Except for funds reserved to return the OU-1 Landfill to a protective state, the \$30,000,000 provided by Congress and an additional \$4,500,000 provided by DOE-EM, has been expended. The contractor is currently backfilling the excavated areas and returning them to a protective state. Depending on weather conditions, completion of backfilling is expected in April 2008. According to current estimates, over 12,000 cubic yards of LLW remain within the OU-1 landfill footprint. The City of Miamisburg continues to petition Congress for additional funding.

Remediation of the PRS 441 rail yard will be completed upon reaching compliance with the Mound 2000 clean-up goals. This work is scheduled to be completed in July 2008.

The PRS 7 work will be completed upon removal of the off-site sewer line. Completion is expected in May 2008.

Upon final verification surveys of the PRS 7 work area, DOE will be able to complete the Record of Decision for Parcels 6, 7 and 8. These parcels will then be offered to the Miamisburg Mound Community Improvement Corporation for transfer by the end of FY 09.

Upon final verification surveys of the PRS 7 work area, DOE will be able to complete the Amended Record of Decision for OU-1. This parcel will then be offered to the Miamisburg Mound Community Improvement Corporation for transfer by the end of FY 09. This will complete the transfer of all remaining parcels of the Mound Plant, except for two areas: Building 126 and adjoining land which will be used by DOE-LM; and a portion of the OU-1 Landfill area having a no-dig institutional control. These areas of the original Mound Site will continue to be owned by the Department of Energy.

PROJECT MANAGEMENT

Based on the direction from EM Headquarters, MCP developed the near-term baseline for each of its projects. These project baselines have undergone an independent review to verify the reasonableness of the scope, cost, and schedule for each project. An approved near-term baseline reflects the identified scope that can reasonably be accomplished for the identified cost in the identified time period if near-term baselines are funded as profiled and contingency funds are provided as required during project execution. It also establishes the baseline as an acceptable point from which to track and control future change. The review and approval process accommodates the likely changes in the EM complex, site priorities and funding plans. These changes could affect both near-term (within the next five years) and life-cycle cost, schedule and scope. Such future changes may be required to comply with applicable environmental legal obligations while maintaining essential functions necessary to protect human health, the environment and national security; reflect funding different from the baseline assumptions; incorporate

technological advances; realize specific programmatic risks; or implement programmatic business cases

LIST OF PROJECTS

Work Breakdown Structure

The OU-1 Work Breakdown Structure (WBS) is a hierarchically tiered framework that organizes and depicts elements representing manageable units of work to be performed in a logical sequence that allows for a means to allocate resources, schedule, and control at the product level.

The WBS structure provides for the tracking of the following work activities:

OH-MB-0031 (OU-1 Landfill): This element includes removal of known areas of waste within and under the existing OU-1 landfill built in 1977. Since neither the DOE nor the Miamisburg Mound Community Improvement Corporation were confident that the funds provided by Congress would be sufficient to completely remediate the OU-1 site, areas of waste were prioritized to assure that the community's highest areas of concern were remediated before funds were possibly exhausted.

OH-MB-0031 (Potential Release Site (PRS) 441, rail load-out area): The remediation of this area was scheduled for completion in 2006 as part of the Miamisburg Closure Contract, but was delayed to allow for support of rail shipment of material exhumed from the OU-1 Landfill.

OH-MB-0030 (PRS 7): This element consists of the removal of an off-site sanitary waste line and two abandoned manholes. This is a part of the resolution of a Federal Facility Agreement dispute with the State of Ohio. Although no contamination is currently expected to be found after removal of the off-site line, verification sampling will be performed

Contract Negotiated Value (Millions)	
OU-1	\$31.1
PRS 441	\$3.0
PRS 7	\$1.3

Cost Estimate by PBS

Three Mound PBSs remain active at this time:

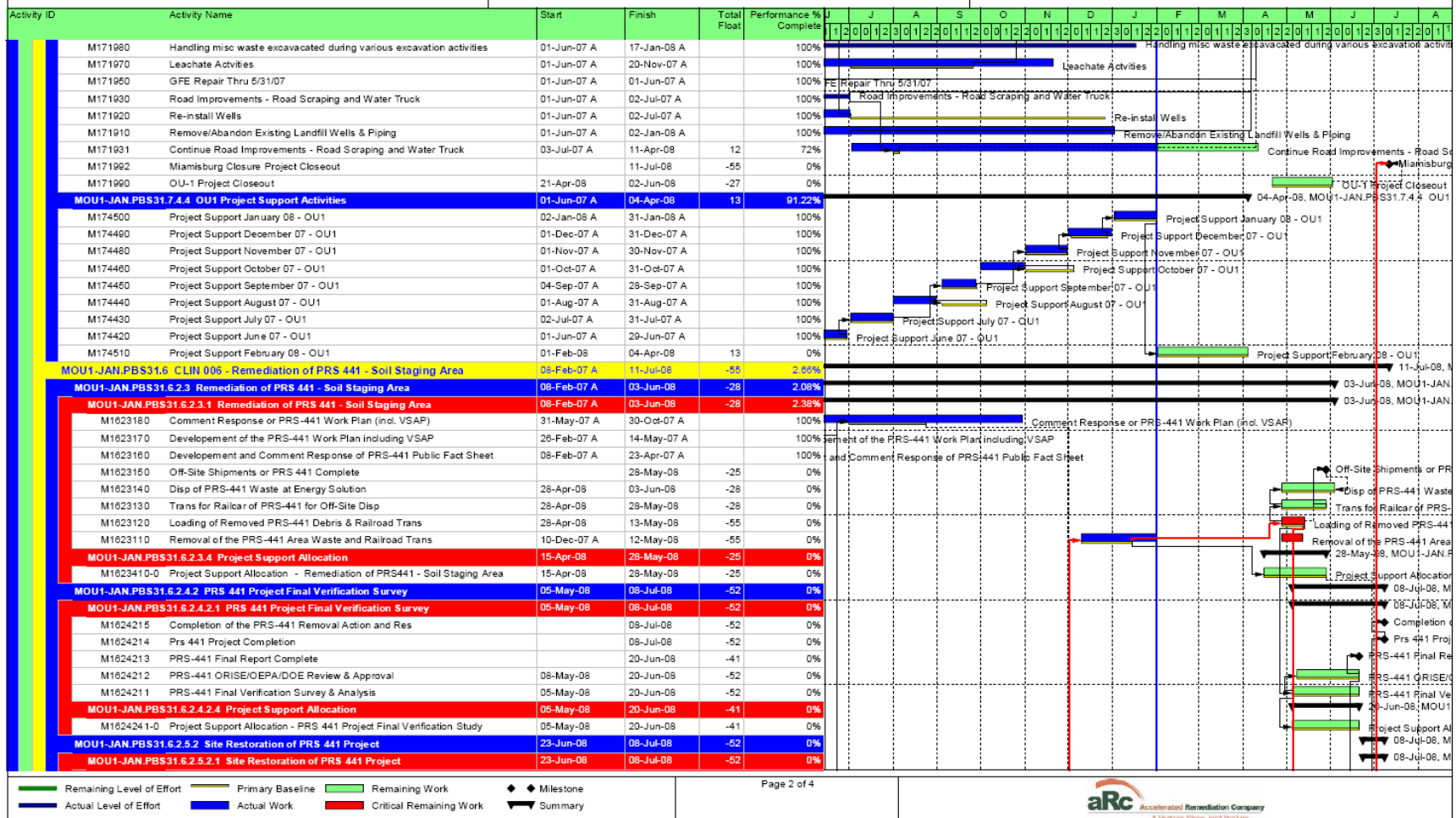
(dollars in thousands)

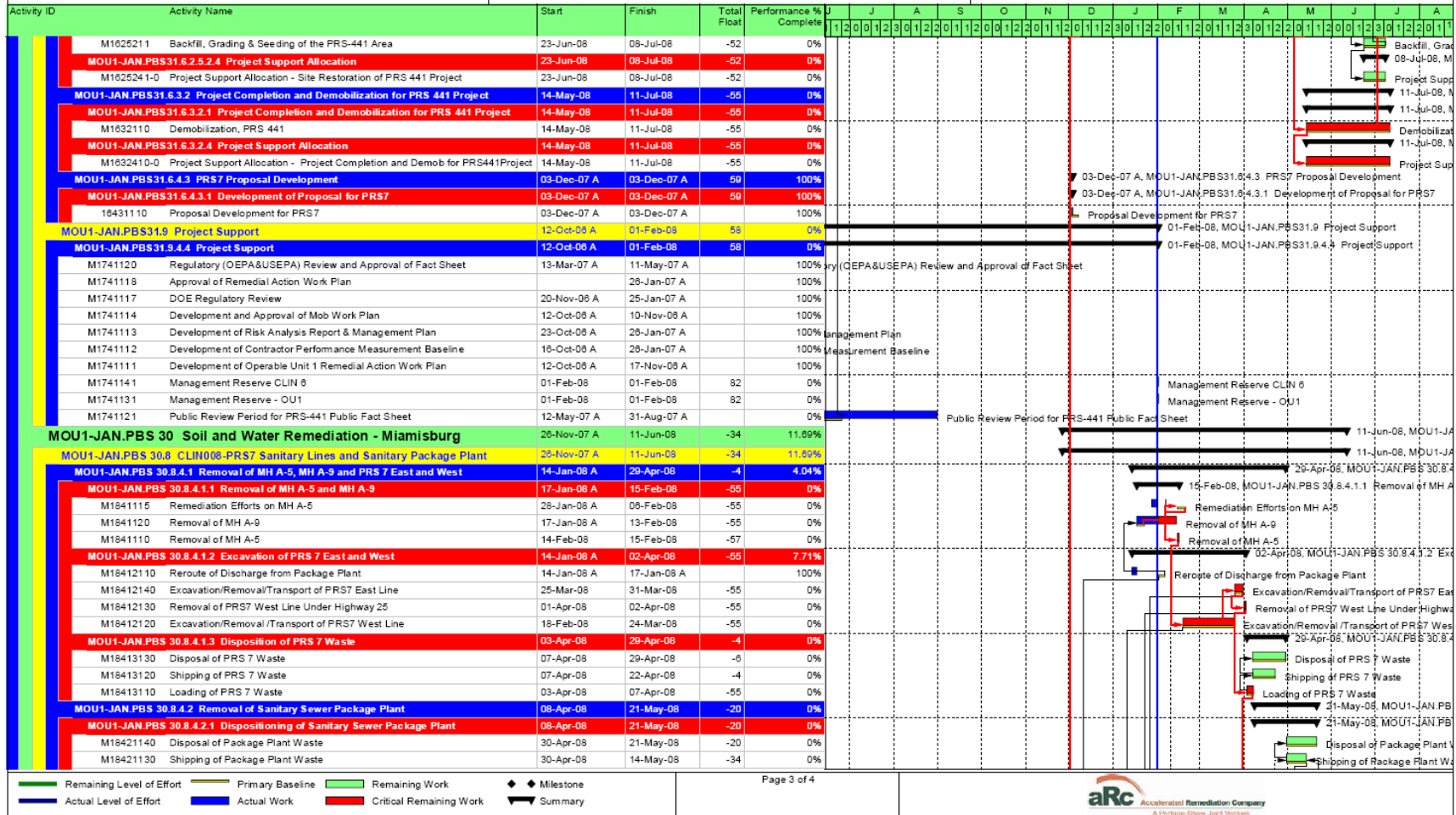
		FY08	FY09	FY10	FY11	FY12
OH-MB-0030	Soil and Water Remediation-Miamisburg	\$5,061	\$26,350	\$3,270	\$2,347	\$2,328
OH-MB-0031	Soil and Water Remediation-OU-1	\$2,218	0	0	0	0
OH-MB-0100	Miamisburg Post-Closure Administration	\$24,971	\$26,350	\$20,963	\$21,651	\$22,702

Activity ID	Activity Name	Start	Finish	Total Float	Performance % Complete	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A		
MOU1-JAN MOUND OU1 JANUARY 08 STATUS FILE						1	2	0	0	1	2	0	1	2	0	1	2	0	1	2	0	1
MOU1-JAN.PBS31 Soil and Water Remediation - OU1																						
MOU1-JAN.PBS31.1	CLIN 001 - Initial Mobilization and Site Sanitary Landfill Waste, C...	12-Oct-06 A	31-May-07 A	13	100%	May-07 A, MOU1-JAN.PBS31.1 CLIN 001 - Initial Mobilization and Site Sanitary Landfill Waste, Cover Berm, and Lines																
MOU1-JAN.PBS31.2	CLIN 002 - Thorium Drum Area (PRS-11) and Volatile Organic Co...	29-Jan-07 A	31-May-07 A	59	100%	May-07 A, MOU1-JAN.PBS31.2 CLIN 002 - Thorium Drum Area (PRS-11) and Volatile Organic Compounds "Hot Spot" Area																
MOU1-JAN.PBS31.3	CLIN 003 - Other Historic Waste Area	14-Feb-07 A	31-May-07 A	59	100%	May-07 A, MOU1-JAN.PBS31.3 CLIN 003 - Other Historic Waste Area																
MOU1-JAN.PBS31.4	CLIN 004 - Dayton Unit Trench			0	0%																	
MOU1-JAN.PBS31.5	CLIN 005 - OU-1 Project Site Restoration and Demobilization			0	0%																	
MOU1-JAN.PBS31.7	CLIN 007 - Priority Based WBS	01-Jun-07 A	11-Jul-08	-55	84.52%																	
MOU1-JAN.PBS31.7.1.0	Stockpile Rad Contaminated Waste - Priority 4	01-Jun-07 A	27-Jun-07 A	59	100%	27-Jun-07 A, MOU1-JAN.PBS31.7.1.0 Stockpile Rad Contaminated Waste - Priority 4																
MOU1-JAN.PBS31.7.1.1	Remaining OU1 Landfill - Priority 5	01-Jun-07 A	13-Feb-08	50	99.95%	13-Feb-08, MOU1-JAN.PBS31.7.1.1 Remaining OU1 Landfill																
M171191	Additional Sanitary Waste Shipped in Railcars	02-Jan-08 A	03-Jan-08 A		100%	Additional Sanitary Waste Shipped in Railcars																
M171190	Additional Sanitary Waste Removed and Transferred	02-Jan-08 A	03-Jan-08 A		100%	Additional Sanitary Waste Removed and Transferred																
M171180	Additional Sanitary Waste Loaded into Railcars	02-Jan-08 A	03-Jan-08 A		100%	Additional Sanitary Waste Loaded into Railcars																
M171170	Continue Removal of Overburden	18-Oct-07 A	01-Nov-07 A		100%	Continue Removal of Overburden																
M171160	Continue Removal/transfer of remaining rad contaminated sanitary waste to 4...	20-Jul-07 A	01-Nov-07 A		100%	Continue Removal/transfer of remaining rad contaminated sanitary waste to 441																
M171150	Removal of Overburden	01-Jun-07 A	02-Jul-07 A		100%	Removal of Overburden																
M171140	Disposal of remaining rad contaminated sanitary waste at Esolutions	25-Jul-07 A	31-Jan-08 A		100%	Disposal of remaining rad contaminated sanitary waste at Esolutions																
M171130	Shipping of remaining rad contaminated sanitary waste into railcars	25-Jul-07 A	19-Dec-07 A		100%	Shipping of remaining rad contaminated sanitary waste into railcars																
M171120	Loading of remaining rad contaminated sanitary waste into railcars	24-Jul-07 A	19-Dec-07 A		100%	Loading of remaining rad contaminated sanitary waste into railcars																
M171110	Removal/transfer of remaining rad contaminated sanitary waste to 441	01-Jun-07 A	02-Jul-07 A		100%	Removal/transfer of remaining rad contaminated sanitary waste to 441																
M171192	Additional Sanitary Waste Disposed at Envirocare	02-Jan-08 A	13-Feb-08	70	99.8%	Additional Sanitary Waste Disposed at Envirocare																
MOU1-JAN.PBS31.7.1.2	Removal of Landfill Berm - Priority 6 - (Access Historic Waste)			0	0%																	
MOU1-JAN.PBS31.7.1.3	Volatile Organic Compounds - Priority 2	01-Jun-07 A	07-Aug-07 A	59	100%	07-Aug-07 A, MOU1-JAN.PBS31.7.1.3 Volatile Organic Compounds - Priority 2																
MOU1-JAN.PBS31.7.1.4	West Leg Historic Area - Priority 3	01-Jun-07 A	30-Nov-07 A	59	100%	30-Nov-07 A, MOU1-JAN.PBS31.7.1.4 West Leg Historic Area - Priority 3																
MOU1-JAN.PBS31.7.1.5	Remaining Historic Waste - Priority 7			0	0%																	
MOU1-JAN.PBS31.7.1.6	Removal Of Remaining Landfill Berm - Priority 8			0	0%																	
MOU1-JAN.PBS31.7.1.7	Site Restoration	09-Jul-07 A	18-Apr-08	3	20.74%	18-Apr-08, MOU1-JAN.PBS31.7.1.7 Site Restoration																
M171780	FVS Step 2 SU 2-4	16-Jul-07 A	28-Jan-08 A		100%	FVS Step 2 SU 2-4																
M171750	FVS Step 1 VOC & SU 1	09-Jul-07 A	29-Feb-08	-8	90%	FVS Step 1 VOC & SU 1																
M171791	Develop Final Survey Report	28-Jan-08 A	25-Mar-08	21	30%	Develop Final Survey Report																
M171710	Backfill of Clean Soil at OU-1	28-Jan-08 A	28-Mar-08	-27	1%	Backfill of Clean Soil at OU-1																
M171790	FVS Step 5 SU 7-8-9 (Stockpile Area)	30-Oct-07 A	11-Mar-08	21	0%	FVS Step 5 SU 7-8-9 (Stockpile Area)																
M171780	FVS Step 4 SU 6	01-Feb-08*	07-Mar-08	23	0%	FVS Step 4 SU 6																
M171770	FVS Step 3 SU 5	01-Feb-08*	07-Mar-08	23	0%	FVS Step 3 SU 5																
M171740	OU-1 Project Completion		18-Apr-08	3	0%	OU-1 Project Completion																
M171730	Completion of the OU-1 Removal Action		13-Feb-08	50	0%	Completion of the OU-1 Removal Action																
M171720	Seeding of Backfilled Area in OU-1	04-Feb-08	11-Apr-08	-27	0%	Seeding of Backfilled Area in OU-1																
MOU1-JAN.PBS31.7.1.8	OU1 Demob	01-Aug-07 A	20-Dec-07 A	-27	100%	20-Dec-07 A, MOU1-JAN.PBS31.7.1.8 OU1 Demob																
MOU1-JAN.PBS31.7.1.9	Field Support Activities	01-Jun-07 A	11-Jul-08	-55	77.73%	11-Jul-08, MOU1-JAN.PBS31.7.1.9 Field Support Activities																
M171911	Continue to Re-install Wells	02-Jul-07 A	02-Jun-08 A		100%	Continue to Re-install Wells																
M171980	Management of Misc Waste thru 5/31/07	01-Jun-07 A	01-Jun-07 A		100%	Management of Misc Waste thru 5/31/07																
M171940	Leachate Activities thru 5/31/07	01-Jun-07 A	01-Jun-07 A		100%	Leachate Activities thru 5/31/07																

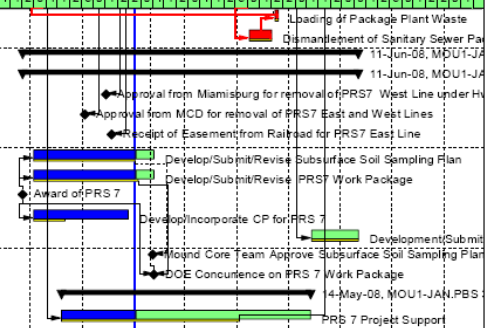
█ Remaining Level of Effort
 █ Primary Baseline
 █ Remaining Work
█ Actual Level of Effort
 █ Actual Work
 █ Critical Remaining Work
◆ Milestone
 ▶ Summary







Activity ID	Activity Name	Start	Finish	Total Float	Performance % Complete	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	
M18421120	Loading of Package Plant Waste	23-Apr-08	25-Apr-08	-55	0%																
M18421110	Dismantlement of Sanitary Sewer Package Plant	08-Apr-08	21-Apr-08	-55	0%																
MOU1-JAN.PBS 30.8.4.3 Project Support for PRS 7																					
MOU1-JAN.PBS 30.8.4.3.2 Development of PRS7 Documents																					
M18432190	Approval from Miamisburg for removal of PRS7 West Line under Hwy 25		14-Jan-08 A		100%																
M18432180	Approval from MCD for removal of PRS7 East and West Lines		02-Jan-08 A		100%																
M18432170	Receipt of Easement from Railroad for PRS7 East Line		17-Jan-08 A		100%																
M18432130	Develop/Submit/Revise Subsurface Soil Sampling Plan	03-Dec-07 A	11-Feb-08	52	70%																
M18432110	Develop/Submit/Revise PRS7 Work Package	03-Dec-07 A	11-Feb-08	-75	70%																
M18432160	Award of PRS 7	28-Nov-07 A			0%																
M18432100	Develop/Incorporate CP for PRS 7	03-Dec-07 A	28-Jan-08 A		0%																
M18432150	Development/Submittal of Closeout Report	15-May-08	11-Jun-08	-34	0%																
M18432140	Mound Core Team Approve Subsurface Soil Sampling Plan		11-Feb-08		73																
M18432120	DOE Concurrence on PRS 7 Work Package		11-Feb-08		-75																
MOU1-JAN.PBS 30.8.4.3.3 Project Support for PRS 7 Field Activities																					
M18433110	PRS 7 Project Support	19-Dec-07 A	14-May-08	-34	20%																



█ Remaining Level of Effort
 █ Actual Level of Effort
 █ Primary Baseline
 █ Actual Work
 █ Remaining Work
 █ Critical Remaining Work
 ◆ ◆ Milestone
 ▼ Summary



Appendix A:

Milestones:

<u>Milestone/Activity</u>	<u>Original Date</u>	<u>Forecast Status</u>	<u>Source</u>
Complete OU-1 Backfill and Seeding	2/7/2008	6/6/2008	contractor's schedule
Complete PRS 441 Removal Action	12/7/2007	9/5/2008	contractor's proposal
Complete OU-1 Task Order	12/31/07	09/03/08	contractor's proposal
Complete Remedy for Operable Unit 1.	2/8/2008	10/15/2008	contractor's schedule

Appendix B:

Key Project Risks:

Risk:

May experience quantity overruns in remediation of PRS 441 rail yard and PRS 7.

Planned Action:

\$2 has been reserved for this possibility