

# Miamisburg - Operable Unit 1 Remediation Project Operating Plan

## BACKGROUND

**Recovery Act Project:** Miamisburg - Operable Unit 1 Remediation  
**TAFS:** 89-09/10-0253  
**Project Identification Code:** 2002220  
**Recovery Act Bill Reference:** PL 111-5 Title IV – Energy and Water  
Development, Defense Environmental Cleanup  
(H.R. 1-26)  
**Project Cost:** \$19,700,000  
**Budget Authority:** 06049, FD.06.20.00.0 - \$19,700,000  
**Program Office:** Environmental Management (EM)  
**Recovery Program Plan:** EM - Defense  
**Management Office:** Paul Lucas, 937-847-8350 ext. 301

## LEADS

**Implementation:** N/A  
**Breakthrough:** N/A  
**Laboratory:** N/A

## I. SUMMARY & OBJECTIVES

**Summary:** This project remediates wastes being released into the environment during operation of the Mound Plant from 1940 through 1994. As a result of these past activities, the soil and groundwater are contaminated with radioactive and hazardous chemicals. The U.S. Environmental Protection Agency placed the site on the National Priority List in 1989 because of chemical contamination present in the site's groundwater and the site's proximity to a sole-source aquifer.

As part of the Mound Base Cleanup Program approximately 282 acres of the 305 acre site have been remediated and made ready for transfer to the Miamisburg Mound Community Improvement Corporation with 127 acres remaining to be transferred. A total of 104 acres are awaiting finalization of a Comprehensive Environmental Response, Compensation and Liability Act Record of Decision, and 19 acres are awaiting completion of the current OU-1 contract. The final 4 acres will be transferred upon completion of this ARRA project.

The purpose of the OU-1 project is to safely remove as much residual contamination as possible within the funding profile leaving the Mound Operable Unit 1 (OU-1) area in a more viable configuration for industrial reuse and effectively reduce the contaminated footprint retained by the federal government by approximately 4 acres. The OU-1 selected response action is an excavation-based response action utilizing a risk based goal of between  $10^{-4}$  to  $10^{-6}$  excess cancer risk for industrial reuse without additional

restrictions beyond those in place for the rest of the site. The current site restrictions are listed below:

- Maintenance of industrial or commercial land use;
- Prohibition against the use of groundwater without prior approval from USEPA and Ohio EPA;
- Site access for federal and state agencies for the purpose of sampling and monitoring;
- Prohibition against removal of soil from within the site boundary (as of 1998) to offsite locations without prior approval from USEPA, Ohio EPA and Ohio Dept. of Health;

The OU-1 Project consists of two (2) distinct projects: the OU-1 Project and the Potential Release Site 441 (PRS 441) Project. The Contractor is responsible for, providing verification samples and reports and the compliant transport and disposal of approximately 14, 500 cubic yards of contaminated soils and debris to the Energy Solutions disposal facility in Clive, Utah. Backfill of the OU-1 excavation, and accomplish site restoration of the OU-1 Project Area to acceptable standards. 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. The wastes in the Historical Waste Disposal area are expected to include radioactive materials, hazardous and sanitary waste.

Funding for the PRS 441 Project scope of work is provided separately from the funding appropriated by Congress for stimulus work. Completion of the remediation of all OU-1 Project Area contaminated soil areas (Potential Release Sites) and all associated Comprehensive Environmental Response, Compensation and Liability Act documentation to close the site and effect transfer of the property to the local community by the end of CY 2011.

This Recovery Act work ties to the following DOE and EM Strategic Goals and Themes:

DOE Strategic Goal 4 – Environmental Responsibility – Protecting the environment by providing a responsible resolution to the environmental legacy of nuclear weapons production.

DOE Strategic Goal 5 – Management and Excellence – Enabling the Department’s mission through sound management and business practices.

EM Goals – To safely disposition large volumes of nuclear waste; safeguard materials that could be used in nuclear weapons; deactivate and decommission thousands of contaminated facilities no longer needed by the Department to carry on its current mission; EM is fulfilling its commitments to reduce overall risk and complete cleanup across all sites for generations to come.

**Public Benefits:** The Miamisburg Mound Community Improvement Corporation (MMCIC) has the task of redeveloping the former Mound Plant Site as a scientific business and technology park. MMCIC’s role in implementing the City of Miamisburg’s

interests has been to develop and implement the strategy and tactics necessary to achieve business growth and job creation to generate economic stability and wealth. The redevelopment strategy has been to leverage the country’s investment in the sites human, real and personal property assets to the greatest extent possible so that business can generate employment and compete through their technological advances.

The work described above will allow for removal of anticipated restrictions on the OU-1 area above those in place for the balance of the site, thus allowing for maximum redevelopment opportunity and associated community benefit to include job creation and/or job retention.

**Recovery Act Project Impacts**

The OU-1 scope of work at Mound would result in the removal of all waste within the OU-1 area and the associated restrictions anticipated relative to the use of this area above those in place for the balance of the site. Currently the MMCIC as an agent of the City of Miamisburg does not plan on accepting the transfer of the OU-1 area as is; leaving this area to be retained by the federal government in perpetuity. The proposed work scope would ultimately allow for the transfer of the OU-1 area from federal ownership to the MMCIC for redevelopment and productive reuse. The effective footprint reduction as a result of this project is approximately 4 acres.

**II. COST & SCHEDULE**

**Budget**

**Table 1a: Budget Implementation 12 Week Obligations (\$M) [ENTER INTO SHAREPOINT DIRECTLY]**

	Week of ARRA Activities (Beginning Week of March 9)											
	1	2	3	4	5	6	7	8	9	10	11	12
<b>Miamisburg - Operable Unit 1 Remediation</b>												

***REMINDER:** All data entered into the SharePoint Recovery Data Collection site will be final at COB April 6. Programs should ensure all appropriate concurrences are obtained and that all project level data submitted electronically via the Recovery Data Collection site is comprehensive, accurate, and up to date.*

**Table 1b: Budget Implementation 12 Week Expenditures (\$M) [ENTER INTO SHAREPOINT DIRECTLY]**

	Week of ARRA Activities (Beginning Week of March 9)											
	1	2	3	4	5	6	7	8	9	10	11	12
<b>Miamisburg - Operable Unit 1 Remediation</b>												

**REMINDER:** All data entered into the SharePoint Recovery Data Collection site will be final at COB April 6. Programs should ensure all appropriate concurrences are obtained and that all project level data submitted electronically via the Recovery Data Collection site is comprehensive, accurate, and up to date.

**Table 2a: Budget Implementation Monthly & Yearly Obligations (\$M) [ENTER INTO SHAREPOINT DIRECTLY]**

	FY 2009 Q3			FY 2009 Q4			FY 2010 Q1			
	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	
Miamisburg - Operable Unit 1 Remediation	FY 2010 Q2			FY 2010 Q3			FY 2010 Q4			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	
	FY 2011 Q1			FY 2011 Q2			FY 2011 Q3 & Q4			
	Oct	Nov	Dec	Jan	Feb	Mar	Apr – Sept			
	FY 2010			FY 2013			FY 2014		FY 2015	

**REMINDER:** All data entered into the SharePoint Recovery Data Collection site will be final at COB April 6. Programs should ensure all appropriate concurrences are obtained and that all project level data submitted electronically via the Recovery Data Collection site is comprehensive, accurate, and up to date.

**Table 2b: Budget Implementation Monthly & Yearly Expenditures (\$M) [ENTER INTO SHAREPOINT DIRECTLY]**

	FY 2009 Q3			FY 2009 Q4			FY 2010 Q1			
	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	
Miamisburg - Operable Unit 1 Remediation	FY 2010 Q2			FY 2010 Q3			FY 2010 Q4			
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	
	FY 2011 Q1			FY 2011 Q2			FY 2011 Q3 & Q4			
	Oct	Nov	Dec	Jan	Feb	Mar	Apr – Sept			
	FY 2010			FY 2013			FY 2014		FY 2015	

**REMINDER:** All data entered into the SharePoint Recovery Data Collection site will be final at COB April 6. Programs should ensure all appropriate concurrences are obtained and that all project level data submitted electronically via the Recovery Data Collection site is comprehensive, accurate, and up to date.

**NOTES:** Monthly expenditures are based on previous historical remediation work performed at the site and assume all \$20M in Recovery Act funding is utilized to complete the OU-1 cleanup. Currently there is not a detailed contractor cost or schedule estimate for this project but based on past site remedial work, the project cost and schedules provided in this plan are the government’s best estimates to date.

Funds Returned and Offsetting Collections

N/A

**Table 3: Funds Returned and Offsetting Collections (\$M)[ENTER INTO SHAREPOINT DIRECTLY]**

	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
N/A							

**REMINDER:** All data entered into the SharePoint Recovery Data Collection site will be final at COB April 6. Programs should ensure all appropriate concurrences are obtained and that all project level data submitted electronically via the Recovery Data Collection site is comprehensive, accurate, and up to date.

**Indirect Costs**

All project cost costs are direct charged and the ARRA G&A rate of 4.11% is the same as the current contract through FY09.

**Changes to Baseline Budget**

This is a new scope of work and is not in the current site baseline.

**Table 4: Changes to Baseline Budgets (\$M) [ENTER INTO SHAREPOINT DIRECTLY]**

Changes to Baseline Budget	Increase/Decrease	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
Program Direction After FY 2010 (Example Only)	Increase							
Continuation of New Programs (Example Only)	Increase							
Project Acceleration (Example Only)	Decrease							

**REMINDER:** All data entered into the SharePoint Recovery Data Collection site will be final at COB April 6. Programs should ensure all appropriate concurrences are obtained and that all project level data submitted electronically via the Recovery Data Collection site is comprehensive, accurate, and up to date.

**NOTES:** [If the above table is not sufficient to describe out year baseline budget changes, provide descriptions here. If Recovery Act activities induce changes to future costs to the USG (increases or decreases), outside of project or program baseline budgets, describe the changes here.]

**Milestones**

Obtain OU#1 Project approval to proceed	4/20/2009
Complete detailed Project Statement of Work (SOW)	4/20/2009

Issue un priced contract modification.	4/27/2009
Obligate 75% of Stimulus Funding	6/20/2009
Reach Agreement on Plan for OU#1 Project with Public and Regulators	5/04/2009
Contractor initiates mobilization	9/01/2009
Contractor begins excavation	10/1/2009
Contractor achieves full staffing	10/1/2009
DOE completes Independent Gov't estimate	7/30/2009
DOE completes contractor proposal review	8/30/2009
Begin off-site Shipments	10/1/2009
Definitize contract change and issue final modification	9/30/2009
Distribute Remaining Stimulus Funds	9/30/2009
Project completed and land transferred to the MMCIC	9/30/2011

*[Programs were asked to submit milestone plans by Monday, March 2nd. The guidance for developing these milestone plans is provided in Attachment J.*

***Recovery Act projects that are Capital Asset Projects, should report the additional planned major milestones in Table 5.***

*All Projects must be managed using either Primavera or Microsoft Project. Further guidance on project management is forthcoming. Please see Overview, Upcoming Requirements, Section E for more information about project management software. Submittal of project management files, including resource loaded schedules, are not expected at this time, however, requests for detailed project management information may occur in the future and programs should prepare to respond accordingly.]*

**Table 5: Delivery Schedule for Capital Asset Projects [ENTER INTO SHAREPOINT DIRECTLY] N/A (until OEMC and EM agree on the 413.3A graded approach)**

Program/OECM Milestone	Delivery (End) Date	Comments
Develop capital asset projects Integrated Project List	TBD	Dependent upon Office of Engineering and Construction Management (OECM) incorporation into integrated project list
Develop Parametric Performance Baseline (Individual Projects)	June 2009	
If < \$100 M Perform IPR, > \$100 M Perform EIR (Individual Projects)	TBD	Dependent on EM/OECM tailored External Independent Review (EIR) approach
Approve Performance Baseline	TBD	Dependent on EM/OECM tailored 413.3A approach (CD-2)
Approve Start of Construction	TBD	Dependent on EM/OECM tailored 413.3A approach (CD-3)
Approve Project Completion	TBD	Dependent on EM/OECM tailored 413.3A approach (CD-4)

***REMINDER:*** All data entered into the SharePoint Recovery Data Collection site will be final at COB April 6. Programs should ensure all appropriate concurrences are obtained and that all project level data submitted electronically via the Recovery Data Collection site is comprehensive, accurate, and up to date.

**NOTES:** Development of Cost, schedule and scope to support the Recovery Funding has not been fully completed. Initial plan is to utilize the FY09 Budget Authority of \$4.75M to complete priority 5 (Sanitary waste) expected to be completed by 8/31/2009. The ARRA funding will begin to be expended starting on 9/1/2009 to complete remaining priorities 6 through 8 and closeout documents.

### III. PERFORMANCE

#### **Performance Measures**

*Definitions:*

**Recovery Act Project Identification Codes [Attachment F]:** Unique project identifiers created by the CFO to use as a common number in financial, procurement, performance, and project management systems linking data from multiple sources back to approved Recovery Act projects.

**Recovery Act Project:** Project and activities approved by the Secretary (see list in Attachment I).

**Activities:** Activities approved by the Secretary that describe Recovery Act-related projects, regardless of the type (i.e., construction, deposition, and R&D).

**Outcome Measure:** A tangible result, effect or consequence of work performance.

**Annual Performance Targets:** Performance outcomes that serve as the basis for assessing the quality and level of success for a given long-term performance measure to ensure alignment with the Departments expectations and Strategic Goals.]

**Table 6: Project Performance Targets [ENTER INTO SHAREPOINT DIRECTLY]**

Recovery Act Project Identification Code	2002220
Linkage To S-1 Priorities	Nuclear Security and Legacy
Linkage to Current Program Goal (if applicable)	DOE Strategic Goal 4 – Environmental Responsibility – Protecting the environment by providing a responsible resolution to the environmental legacy of nuclear weapons production.  EM Goals – To safely disposition large volumes of nuclear waste; safeguard materials that could be used in nuclear weapons; deactivate and decommission thousands of contaminated facilities no longer needed by the Department to carry on its current mission; EM is fulfilling its commitments to reduce overall risk and complete cleanup across all sites for generations to come.
Three-Year Outcome-Oriented Performance Measure	Complete the OU-1 (4 acres) cleanup and all required closure/closeout and regulatory documentation.

First Year Performance Target FY 2009 accomplishments)	Complete the planning and mobilization effort for cleanup of OU-1
Q3 - Project-Level Quarterly Performance Milestone(s)	*Complete OU-1 planning documents
Q4 - Project-Level Quarterly Performance Milestone(s)	*Complete OU-1 field mobilization; start excavation field work
Second Year Performance Target FY 2010)	Complete OU-1 (4 acres) cleanup
Q1 - Project-Level Quarterly Performance Milestone(s)	*Complete Priority 5 (Sanitary Waste removal)
Q2 - Project-Level Quarterly Performance Milestone(s)	**Complete Priority 6 (Landfill Berm)
Q3 - Project-Level Quarterly Performance Milestone(s)	**Complete Priority 7 (Historical Waste)
Q4 - Project-Level Quarterly Performance Milestone(s)	**Complete Priority 8 (Remaining Landfill Berm)
Third Year Performance Target (FY 2011)	Complete all regulatory closeout documentation
Q1 - Project-Level Quarterly Performance Milestone(s)	**Amend OU-1 Record of Decision

Note :

\*Base Program funded (FY09 Omnibus funding) milestones will run through the 1st Quarter of FY 2010.

\*\*Stimulus funded spending and associated milestone accomplishments aren't expected to start until the 2<sup>nd</sup> Quarter FY 2010. This allows the two separate funding sources to be tracked and managed independently.

**Table 7: National Strategic Benefits N/A [ENTER INTO SHAREPOINT DIRECTLY]**

1. Carbon Emission Reductions: Estimated 5-year undiscounted CO <sub>2</sub> reduction (in metric tons of CO <sub>2</sub> equivalent) are N/A
2. Oil Consumption Reductions: Estimated 5-year reduction in undiscounted oil consumption (in barrels of oil equivalent) is N/A

**REMINDER:** All data entered into the SharePoint Recovery Data Collection site will be final at COB April 6. Programs should ensure all appropriate concurrences are obtained and that all project level data submitted electronically via the Recovery Data Collection site is comprehensive, accurate, and up to date.

**NOTES :** N/A

DRAFT

## IV. MANAGEMENT

### Secretarial-level Items

#### Intended Results and Linkage to Secretary's Priorities

**Table 8: Secretary's Priorities [ENTER INTO SHAREPOINT DIRECTLY]**

Secretary's Priorities	Project Impacts (Qualitative)	Project Impacts (Quantitative)
Science and Discovery	N/A	N/A
Clean, Secure Energy	N/A	N/A
Economic Prosperity	<ul style="list-style-type: none"> <li>• Create maximum opportunity for site economic development and reuse. Create new job opportunities.</li> </ul>	<ul style="list-style-type: none"> <li>• Number of jobs created and/or retained in 2009/2010 (TBD)</li> </ul>
National Security and Legacy	<ul style="list-style-type: none"> <li>• Continue DOE's obligation to decontaminate and decommission facilities per National Energy Policy Act of 1992.</li> <li>• To the extent possible, remove, transport and dispose of as much waste material from OU-1 to levels compliant with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the state of Ohio.</li> </ul>	<ul style="list-style-type: none"> <li>• Excavate approximately 14, 500 cubic yards of contaminated soils and debris to the Energy Solutions disposal facility in Clive, Utah.</li> </ul>
Climate Change	N/A	N/A

**REMINDER:** All data entered into the SharePoint Recovery Data Collection site will be final at COB April 6. Programs should ensure all appropriate concurrences are obtained and that all project level data submitted electronically via the Recovery Data Collection site is comprehensive, accurate, and up to date.

### **Collaboration and Coordination**

Collaboration and interaction with local officials and stakeholders, as well as, federal and state regulators (U.S. and Ohio EPA) will remain consistent with current site practices. Regular coordination and status meetings will be held at least monthly. Also, there will be waste shipments to Energy Solutions in Utah or other commercially-operated waste treatment/ storage/disposal facilities. Coordination with these interfaces already exists; however, it will be enhanced throughout this project.

## **Federal Infrastructure Investments**

There are no infrastructure investment project activities associated with this Recovery Act Project.

Accelerating the removal and proper disposal reduces risk of releases of this material to the environment

The OU-1 scope of work at Mound would result in the removal of all waste within the OU-1 area and the associated restrictions anticipated relative to the use of this area above those in place for the balance of the site. The proposed work scope would ultimately allow for the transfer of the OU-1 area from federal ownership to the MMCIC for redevelopment and productive reuse.

## **Line Management**

DOE and contractor personnel are proceeding with a contractor readiness self-assessment process to evaluate impacts (if any) as a result of ARRA project activities. This assessment will include the following areas:

- Integrated Safety Management System (ISMS) adequacy
- Safety and quality assurance requirements flowed to sub-tier contractors
- Newly-hired workers receive full training
- Rigorous contractor oversight program
- Fully developed disposition path for all materials/waste
- Segregation of Recovery Act Project safety performance tracking and reporting
- System in place to recognize changed conditions and adjust oversight/resources

Daily meetings will be conducted by the project field team to ensure safe, efficient, and cost-effective operations. The project metrics, to include performance and safety, will be reviewed in the weekly Integrated Project Team meetings. The project performance will be tracked and reported monthly with the existing contractor's certified Earned Value Management System. A combination of federal and support contractor resources will provide dedicated project and field oversight to all Recovery Act Project activities.

The contractor will use existing practices/procedures to maintain accountability and transparency with respect to Recovery Act activities. These practices include cost tracking through a Defense Contract Audit Agency audited accounting and procurement system and a DOE audited project management reporting system. ARRA projects will be tracked and reported independently. The contractor will use the existing work management program and integrated safety management system (ISMS) to plan and execute the ARRA projects.

## **Needs from Staff Offices**

### **1) Human Capital**

Support from the Environmental Management Consolidated Business Center will be required for: Project Management, Contracts, Engineering, Finance / Accounting, Property Management

**Table 9: Information on Hiring Under the Recovery Act** [ENTER INTO SHAREPOINT DIRECTLY]

# & Type of Positions (Title, Series and Grade)	Location (HQ or Field – w/location)	Federal or Contractor	Timeframe (1-6mos; 6+mos; other; specify date needed if possible)
N/A	N/A	N/A	N/A

**REMINDER:** All data entered into the SharePoint Recovery Data Collection site will be final at COB April 6. Programs should ensure all appropriate concurrences are obtained and that all project level data submitted electronically via the Recovery Data Collection site is comprehensive, accurate, and up to date.

DRAFT