

**Attachment B:  
Moab – Accelerate uranium mill tailings pile remediation Project  
Operating Plan**

**BACKGROUND**

**Recovery Act Project:** Moab Recovery Act Project  
**TAFS:** 89-09/10-0335  
**Project Identification Code:** 2002060  
**Recovery Act Bill Reference:** PL 111-5 Title IV – Energy and Water  
Development, Non-Defense Environmental Cleanup  
(H.R. 1-25)  
**Project Cost:** \$108,350,000  
**Budget Authority:** 05949, FE.01.13.00.0 - \$108,350,000  
**Program Office:** Environmental Management (EM)  
**Recovery Program Plan:** EM - Non-Defense  
**Management Office:** Donald Metzler, Grand Junction Office,  
[don.metzler@gjem.doe.gov](mailto:don.metzler@gjem.doe.gov), 970-257-2115

**LEADS**

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

**I. SUMMARY & OBJECTIVES**

**Summary:** The scope of the Moab Uranium Mill Tailings Remedial Action (UMTRA) Project is to relocate 16 million tons of uranium mill tailings at the former uranium-ore processing facility near Moab, Utah, by rail to an engineered disposal cell 30 miles north at Crescent Junction, Utah. The current base project is scheduled for completion in 2028, this accelerated Recovery Act work scope reduces the project completion date by 3 years to 2025. The proposed project for ARRA funding will increase the quantity of mill tailings relocated by the end of fiscal year 2011 by 2 million tons by using an additional 12 rail cars per day to transport the tailings. This protects the environment by providing a responsible resolution to the environmental legacy of nuclear weapons production. The acceleration fulfills EM’s commitment to reduce overall risk and complete cleanup by accelerating this project by approximately three years and reducing lifecycle costs by an estimated \$139M.

**Public Benefits:** New non-federal jobs are expected to be created or retained through execution of this Recovery Act project.

**Recovery Act Project Impacts:** The Recovery Act money provided for this acceleration project will reduce lifecycle costs by approximately \$139M. In addition to reducing lifecycle costs and creating non-federal jobs, the accelerated completion of the project (from 2028 to 2025) will reduce the risk to public health and the environment by moving tailings away from the Colorado River sooner than originally planned.

## 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 |
| [Project Title] |   |   |   |   |   |   |   |   |   |    |    |    |

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All obligation/expenditure projections depend on when ARRA funding is made available.

**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 |
| [Project Title] |   |   |   |   |   |   |   |   |   |    |    |    |

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Assumes we will begin costing to the contracts one week after obligating money to the contracts.

**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     |  |
| [Project Title] | 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 |  |
|                 |            |     |     |            |     |      |                 |     |         |  |

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**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     |  |
| [Project Title] | 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 |  |
|                 |            |     |     |            |     |      |                 |     |         |  |
|                 |            |     |     |            |     |      |                 |     |         |  |
|                 |            |     |     |            |     |      |                 |     |         |  |

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**NOTES:** [Discuss any important issues related to budget and schedule.]

Funds Returned and Offsetting Collections

N/A

Provide the expected dollar amount of funds returned or offsetting collections, if any, in Table 3]

**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 |
|---|-------|-------|-------|-------|-------|-------|-------|
| [Provide description and amounts for Funds Returned and Offsetting Collections] |       |       |       |       |       |       |       |

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Indirect Costs

This work will be performed by an existing ID/IQ remedial action contractor utilizing an approved indirect rate structure. We anticipate an indirect rate of approximately 20% for FY09, FY10 and FY11 (including fringe, G&A, and overhead). All contractor indirect rates are subject to an annual audit review by the Defense Contract Audit Agency (DCAA) and require final approval by the Contracting Officer.

Changes to Baseline Budget

**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)            | Increase          |       |       |       |       |       |       |       |
|  |                   |       |       |       |       |       |       |       |
|  |                   |       |       |       |       |       |       |       |
|  |                   |       |       |       |       |       |       |       |
|  |                   |       |       |       |       |       |       |       |

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**NOTES:** By accelerating the project completion date by three years, the lifecycle cost savings is expected to be approximately \$139M.

**Milestones**

The milestones for the Moab Recovery Act Project are provided below. Milestone dates are conceptual and will be adjusted when funding availability is known, contract actions are completed, and detailed cost estimates and field schedules are prepared.

| Weekly/Monthly Milestones                              | DATE      | Comments                                      |
|--|-----------|---|
| Issue Change Order                                     | 4/6/2009  | Work will begin through unpriced change order |
| Initial Recovery Act Funds Distribution/obligate funds | 4/6/2009  | 80% of funding obligated                      |
| Start hiring process                                   | 4/6/2009  |   |
| Labor/equipment/ODCs                                   | 4/13/2009 |   |
| Labor/equipment/ODCs                                   | 4/20/2009 |   |
| Labor/equipment/ODCs                                   | 4/27/2009 |   |
| Train new hires  | 4/27/2009 |   |
| Labor/equipment/ODCs                                   | 5/4/2009  |   |
| Labor/equipment/ODCs                                   | May-09    |   |
| Additional new hire training                           | May-09    |   |
| Start accelerated tailings haul (22 cars / 7 days)     | Jun-09    | Scheduled for 6/8/2009                        |

|   |        |  |
|---|--------|--|
| Labor/equipment/ODCs                                    | Jun-09 | 23,651 additional tons hauled (above base program) |
| Haul tailings   | Jul-09 | 31,534 additional tons                             |
| Start hiring for ramp-up scenario (34 cars / 7 days)    | Aug-09 |  |
| Haul tailings   | Aug-09 | 39,418 additional tons                             |
| Obligate funds 9/16/09                                  | Sep-09 | 20% of funding obligated                           |
| Complete Overpass on SH279                              | Sep-09 | Scheduled for 9/18/2009                            |
| Haul tailings   | Sep-09 | 31,534 additional tons                             |
| Complete hiring for ramp-up scenario (34 cars / 7 days) | Sep-09 | Scheduled for 9/20/2009                            |
| Start 34 cars / 7 days accelerated haul                 | Sep-09 | 9/28/2009  |
| Haul tailings   | Oct-09 | 85,286 additional tons                             |
| Haul tailings   | Nov-09 | 71,669 additional tons                             |
| Haul tailings   | Dec-09 | 89,586 additional tons                             |
| Haul tailings   | Jan-10 | 71,669 additional tons                             |
| Haul tailings   | Feb-10 | 71,669 additional tons                             |
| Haul tailings   | Mar-10 | 71,669 additional tons                             |
| Haul tailings   | Apr-10 | 89,586 additional tons                             |
| Haul tailings   | May-10 | 71,669 additional tons                             |
| Haul tailings   | Jun-10 | 71,669 additional tons                             |
| Haul tailings   | Jul-10 | 89,586 additional tons                             |
| Haul tailings   | Aug-10 | 71,669 additional tons                             |
| Haul tailings   | Sep-10 | 77,402 additional tons                             |
| Haul tailings   | Oct-10 | 85,286 additional tons                             |
| Haul tailings   | Nov-10 | 71,669 additional tons                             |
| Haul tailings   | Dec-10 | 89,586 additional tons                             |
| Haul tailings   | Jan-11 | 71,669 additional tons                             |
| Haul tailings   | Feb-11 | 71,669 additional tons                             |
| Haul tailings   | Mar-11 | 71,669 additional tons                             |
| Haul tailings   | Apr-11 | 89,586 additional tons                             |
| Haul tailings   | May-11 | 71,669 additional tons                             |
| Haul tailings   | Jun-11 | 71,669 additional tons                             |
| Haul tailings   | Jul-11 | 89,586 additional tons                             |
| Haul tailings   | Aug-11 | 71,669 additional tons                             |
| Haul tailings   | Sep-11 | 77,402 additional tons                             |

**Table 5: Delivery Schedule for Capital Asset Projects [ENTER INTO SHAREPOINT DIRECTLY]**

| Program/OECM Milestone  | Delivery (End) Date | Comments   |
|---|---------------------|--|
| Develop capital asset projects<br>Integrated Project List                   |                     |  |
| Develop Parametric<br>Performance Baseline<br>(Individual Projects)         | February 2008       | Performance Baseline was developed for CD-2/3 approval   |
| If < \$100 M Perform IPR, ><br>\$100 M Perform EIR<br>(Individual Projects) | February 2008       | IPR was conducted during February 2008. After minor corrective actions, EM-50 recommended Performance Baseline (NTB & OPER) approval April 2008. |
| Approve Performance Baseline  | August 2008         |  |
| Approve Start of Construction   | August 2008         |  |
| Approve Project Completion  |                     |  |
|   |                     |  |

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### **III. PERFORMANCE**

#### **Performance Measures**

All cost and schedule estimates depend on when funding is made available and contract actions are complete. After being given authorization to proceed, the contractor requires approximately 60 days to ramp up to the 22 car / 7 day schedule and approximately 6 months to ramp up to the 34 car / 7 day schedule.

Table 6 reflects performance targets for FY 2010 and FY 2011 work scope. However, the Moab Recovery Act Project also includes work scope performed in FY 2009. Based on current assumptions, 126,000 tons of additional tailings are projected to be hauled during FY 2009 with ARRA funding.

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

|  |   |
|--|---|
| Recovery Act Project Identification Code | 2002060   |
| Linkage To S-1 Priorities                | Create jobs and accelerate environmental clean-up of legacy waste |
| Linkage to Current Program Goal          | DOE Strategic Goal 4 – Environmental                              |

|   |   |
|---|---|
| (if applicable)                                       | <p>Responsibility – Protecting the environment by providing a responsible resolution to the environmental legacy of nuclear weapons production.</p> <p>EM Strategic 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</p> |
| Three-Year Outcome-Oriented Performance Measure       | Dispose of an additional 1.941M tons of tailings and create/retain jobs   |
| First Year Performance Target (FY09 accomplishments)  | Dispose of an additional 75,000 tons of tailings  |
| Q3 - Project-Level Quarterly Performance Milestone(s) | N/A   |
| Q4 - Project-Level Quarterly Performance Milestone(s) | Dispose of an additional 75,000 tons of tailings  |
| Second Year Performance Target (FY10)                 | Dispose of an additional 933,000 tons of tailings   |
| Q1 - Project-Level Quarterly Performance Milestone(s) | Dispose of an additional 246,000 tons of tailings   |
| Q2 - Project-Level Quarterly Performance Milestone(s) | Dispose of an additional 215,000 tons of tailings   |
| Q3 - Project-Level Quarterly Performance Milestone(s) | Dispose of an additional 233,000 tons of tailings   |
| Q4 - Project-Level Quarterly Performance Milestone(s) | Dispose of an additional 239,000 tons of tailings   |
| Third Year Performance Target (FY11)                  | Dispose of an additional 933,000 tons of tailings by the end of the second year.  |
| Q1 - Project-Level Quarterly Performance Milestone(s) | Dispose of an additional 246,000 tons of tailings   |
| Q2 - Project-Level Quarterly Performance Milestone(s) | Dispose of an additional 215,000 tons of tailings   |
| Q3 - Project-Level Quarterly Performance Milestone(s) | Dispose of an additional 233,000 tons of tailings   |
| Q4 - Project-Level Quarterly Performance Milestone(s) | Dispose of an additional 239,000 tons of tailings   |

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**National Strategic Benefits**

N/A

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

|   |
|---|
| 1. Carbon Emission Reductions: Estimated 5-year undiscounted CO <sub>2</sub> reduction (in metric tonnes of CO <sub>2</sub> equivalent) are [fill in the blank] |
| 2. Oil Consumption Reductions: Estimated 5-year reduction in undiscounted oil consumption (in barrels of oil equivalent) is [fill in the blank]                 |

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**IV. MANAGEMENT**

**Secretarial-level Items**

The initiatives outlined in this plan support the following Secretary of Energy’s priorities:

- Economic Prosperity
- National Security and Legacy

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

| Secretary’s Priorities       | Project Impacts (Qualitative)                     | Project Impacts (Quantitative)   |
|------------------------------|---|--|
| Science and Discovery        | None  | None   |
| Clean, Secure Energy         | None  | None   |
| Economic Prosperity          | Create and/or Retain Jobs                         | Jobs will be created or retained   |
| National Security and Legacy | Accelerate Environmental Clean Up of Legacy Waste | An additional two million tons of Uranium Mill Tailings will be moved and disposed by end of 2011 reducing the overall project completion date from 2028 to 2025 |
| Climate Change               | None  | None   |

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**Collaboration and Coordination**

The project involves accelerating tailings transport by increasing the number of rail cars per train from 22 to 34 and by increasing the number of train shipments from 4 to 7 trains per week. Coordination with state and local government entities already occurs but will be enhanced due to the accelerated nature of the Recovery Act project.

- **State Government** Utah Department of Transportation (UDOT): Trucks carrying containers between the mill tailings pile and the rail loading area must cross State Highway 279. UDOT is expected to require an overpass be constructed over SH279 due to the increased number of trucks required for the Recovery Act project. Coordination with UDOT will be required.
- **Local Government** Grand County, Utah: Coordination with the county will also be required relative to the crossing of SH279.

### **Federal Infrastructure Investments**

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

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

### **Line Management**

To maintain accountability and transparency with respect to Recovery Act activities DOE and the contractors will hold periodic management review meetings to monitor work progress, ensure proper reporting, discuss progress and any potential impediments, and keep communication lines open on all aspects of recovery funding.

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 DCAA audited accounting and procurement system and a DOE audited project management reporting system. As a part of this reporting system, the contractor will continue to have monthly internal project reviews. The 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. The contractor will have resources in place for documentation purposes for the ARRA projects.

### **Needs from Staff Offices**

Procurement – Support provided by EMCBC

Finance and Budget – Support from EMCBC as necessary

#### **1) Human Capital**

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

| # & Type of Positions<br>(Title, Series and Grade)                         | Location<br>(HQ or Field –<br>w/location) | Federal or<br>Contractor | Timeframe (1-6mos;<br>6+mos; other; specify date<br>needed if possible) |
|--|---|--------------------------|---|
|  |   |                          |   |
| Facility Representative<br>GS-801-9/11<br>Program Specialist GS-<br>301-11 | Field                                     | Federal                  | 1 – 6 months  |

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