

**U. S. Department of Energy**

**Miamisburg Closure Project**

**RISK MANAGEMENT PLAN**

**Volume III**

**LEGACY MANAGEMENT  
TRANSITION RISKS**



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## I. INTRODUCTION

This document further discusses risks associated with transition of post-closure activities from the Miamisburg Closure Project (MCP) office to the Office of Legacy Management (LM) as defined in Volume I and assesses the potential impact of each risk on DOE-MCP's ability to achieve "EM completion" (as defined in EM-1 memo dated 2/12/03 [copy attached]) and the associated "transition of long-term response action requirements" (as defined in EM-1 memo dated 6/10/03 [copy attached]) by the 10/1/06 date identified in the Site Transition Plan (approved by EM-1 and LM-1 on 3/29/05) for DOE-EM/MCP's transfer of site custodianship to DOE-LM. A subset of this risk to successful site transition by 10/1/06 is DOE-EM/MCP's ability to maintain ongoing operations (i.e., prior to, and up to 10/1/06 transfer date) after DOE-MCP accepts CH2MHill Mound, Inc's 10/1/06 declaration of physical completion (currently scheduled for late July 2006). It is DOE-EM/MCP's responsibility to fill any such "gaps" in MCP site operations after CHM exits the site, but before LM assumes site custodianship on 10/1/06.

The MCP and LM jointly identify potential programmatic risks that might affect the scope and/or the schedule of the transition and could potentially delay the transition. The approach is taken to ensure that uncertainties and risks are adequately considered in a structured and systematic way and alternatives identified.

Each risk is prioritized as high, medium or low. MCP and LM are then jointly identifying more detailed mitigation strategies for each transition risk based upon the baseline date when each risk, if not resolved, will result in negative impact on the successful completion of the closure contract. The mitigation strategies being developed will include dates by which DOE must achieve resolution of each risk before the aforementioned baseline dates actually occur.

A simple assessment methodology<sup>1</sup> is used to analyze risks identified, which is largely based on qualitative analysis derived from best understanding of conditions affecting individual risk items. Details of risk description and assessment are provided in Section II of this volume.

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<sup>1</sup> Project and Program RISK MANAGEMENT, The PMBOK Handbook Series, published by the Project Management Institute (PMI)

## **II. RISK DESCRIPTION AND ASSESSMENT**

### ***1.1 Program Management: Delay in Business Functions Transfer to EM CBC***

#### **Description**

A seamless transition to the CBC of continuing EM activities may be delayed if functions that were assumed to be transferred to the EM CBC are unable to be transferred or are unable to be transferred in a timely manner.

#### **Assessment**

LM, EM, and the CBC must work together to ensure that a business closeout process is developed.

### ***2.1 Environmental: Unresolved Cleanup Issues***

#### **Description**

There is a risk that unresolved cleanup issues could remain at the time of transfer of the site to LM (e.g., the Operable Unit 1 (OU-1) sanitary landfill continues to be an issue with the stakeholders and regulators).

#### **Assessment**

EM must ensure that all cleanup issues are resolved prior to transfer. EM must complete evaluation of “offsite” areas, the Parcel 6/7/8 ROD, and the Final Site-wide O&M Plan before being in a position to declare EM completion. Ideally, these activities will be completed no later than 10/1/06. However, so long as EM continues to perform this work until each action is complete, it should not impact LM’s ability to accept custodianship of the site (at a minimum, those portions of the site that have a remedy in place [i.e., Parcels D, H, 4, 3, and Phase I]).

### ***3.1 Record Management: Insufficient Finding Aids***

Finding aids may be insufficient to support the identification and retrieval of records in the future that may be required to support post-closure activities.

#### **Assessment**

Initiate a cooperative effort between LM and EM to document existing finding aids. Determination of mitigation actions required will be refined with each successive quarterly readiness reviews by the Site Transition Team.

### ***4.1 Information Management: Delay in Database Transfer***

There may be delays in the transfer (or insufficient transfer) of relational databases (e.g., MEIMS) deemed critical for post-closure because of lack of knowledgeable personnel, resources, etc.

**Assessment**

Aggressively pursue accelerated transition of relational databases before site institutional knowledge is lost because of dwindling contractor personnel and resources.

***6.1 Property: Delay in Parcel Transfer***

MMCIC may delay acceptance of Parcel 6/7/8 from DOE.

**Assessment**

Aggressively pursue cooperative relationship with MMCIC to minimize likelihood of unexpected responses when DOE offers a parcel for conveyance. Prepare five-year life cycle budget through FY 2011 for maintenance and other costs associated with DOE's continued ownership of Parcel 6/7/8 through no later than 9/30/11 (which is a full three years after FY08- - a date that captures the 2/1/08 date in Provision XX [Limitation of Buyer's and Seller's Obligation] in the site sales contract between DOE and MMCIC dated 1/23/98). The FY07 budget formulation includes the potential for GSA to disposition Parcel 6/7/8 when, and if, the MMCIC does not have physical ownership of the property by 2/1/08.

***6.2 Property: Delay in Real Estate Transaction***

Significant resources may be required to support the upcoming real estate transactions, as well as to identify and inventory real estate records. However, there are limited personnel who are qualified to conduct real estate transactions for DOE EM and LM.

**Assessment**

Solicit the support of qualified personnel from other sites (e.g., the Hanford Site) and identify lessons learned from other sites to develop more efficient processes. Identify outstanding actions in each quarterly readiness review for real property.

### III. RISK LEVEL SUMMARY

Using the methodology provided in the Risk Overview Volume I and the assessments provided in Section 2 of this Volume, each risk is summarized below in Exhibit 4-2. Potential Programmatic Risks. The Programmatic Risks are taken, verbatim, from the STP which is under configuration control. Consequently, Exhibit 4-2. has not been modified or updated. New information and/or updates have been added to the narrative in Section II RISK DESCRIPTION AND ASSESSMENT. Risk Level considers the severity of a risk versus the likelihood of risk materializing. Severity of impact is based on Table I-3 in the Methodology section of Volume I, where cost increments were assigned a severity level (Negligible, Marginal, Significant, Critical or Crisis). When assessing risk severity, worst case cost estimates and critical path impacts were considered. As discussed in Volume I, under Methodology, DOE Closure Risks are not expected to directly impact critical path activities. However, with any risk, when creating additional unplanned work, project life will be extended unless the new work is: 1). absorbed through project efficiencies or 2). new funding is provided. At this point, these questions cannot be answered. Therefore, for this volume cost is considered the most meaningful impact and to some extent is a surrogate for schedule impact--- since greater costs potentially represent more work and time.

Likelihood of risk materializing categories (Very Unlikely, Unlikely, Likely or Very Likely) is shown in Table I-4 of Volume I and represents subjective estimates of relative probability based on site knowledge. In general, the Risk Level Summary Table below provides a qualitative perspective of each DOE Closure risk. Obviously those risks with high cost impacts and a high likelihood of materializing need aggressive attention. However each risk item merits serious consideration, since even relatively low cost and low likelihood risks can have a serious impact, particularly if identified/addressed at the later stages of site transition.

<b>Exhibit 4-2. Potential Programmatic Risks</b>		
<b>WBS ELEMENT/POTENTIAL RISK</b>	<b>Risk Priority</b>	<b>Mitigation Action</b>
<b>1. PROGRAM MANAGEMENT</b>		
1.1 Closeout of EM activities may be delayed if functions that were assumed to be able to be transferred to the EM CBC are unable to be transferred or are unable to be transferred in a timely manner.	High	LM and EM must work together to ensure a business closeout process is developed.
1.2 Congressional appropriations may not remain at levels sufficient to implement a successful and on-time site closure and transfer.	Low	Update Closure Baseline and Transition Baseline to reflect required changes. Assess and communicate direct and indirect impacts to scope,

<b>Exhibit 4-2. Potential Programmatic Risks</b>		
		cost, and schedule.
<b>2. Environmental</b>		
2.1 There is a risk that unresolved cleanup issues could remain at the time of transfer of the site to LM (e.g., the OU-1 sanitary landfill continues to be an issue with the stakeholders and regulators).	High	EM must ensure that all cleanup issues are resolved prior to transfer.  Pursuit of regulatory path forward on OU-1 landfill, canal ROD, and off-site impacted areas
2.2 A moderate level of uncertainty exists as to the commitment and ability of the regulators to support the delivery of the CERCLA documents per EM contractor's baseline loading.	Medium	EM and the Ohio Field Office are instituting significant management tracking and performance metrics to ensure that the Government Furnished Services (GFS/I) is delivered as expected.
2.3 If seeps continue to show tritium (or volatile organic compounds) above the maximum concentration limits (MCLs), the regulators may want an active remedy (e.g., digging plus access controls), as opposed to the current practice of monitoring the seeps.	Medium	Ensure effective source-term removal where applicable.
2.4 There may be a delay in obtaining an approved Final Site-Wide ROD before September 30, 2006. This could happen, for example, if DOE accepts completion of the EM contractor contract, but the Draft Final ROD is not ready for signature.	Low	This delay would likely not cause a delay in transfer as long as EM continues to maintain responsibility (i.e., full-time equivalents, budget) for only that aspect (i.e., Parcel 8 ROD, Environmental Summary, and U.S. EPA approval to transfer the parcel) of the MCP.
<b>3. Records Management</b>		
3.1 Finding aids may be insufficient to support the identification and retrieval of records in the future that may be required to support post-closure activities.	High	Initiate a cooperative effort between LM and EM to identify/document existing finding aids. Determination of mitigation actions required will be borne out by assessment.
3.2 EM may not inventory, archive, or disposition all of its records prior to transfer of the site because of lack of knowledgeable personnel, resources, etc.	Medium	Determine resources required to disposition records in accordance with NARA guidance prior to transfer of the site.
<b>4. Information Management</b>		
4.1 There may be delays in the transfer (or insufficient transfer) of relational databases (e.g., MEIMS) deemed critical for post-closure because of lack of knowledgeable personnel, resources, etc.	High	Aggressively pursue accelerated transition of relational databases before site institutional knowledge is lost because of dwindling contractor personnel and resources.
<b>5. Stakeholder and Regulator Interface</b>		

<b>Exhibit 4-2. Potential Programmatic Risks</b>		
5.1 Post-Closure Tri-Party Agreement may not be signed prior to transfer.	Medium	Although an important milestone, this is not likely to affect transfer as the current FFA meets the needs of EM for EM completion. LM will proactively pursue (with EM participation/cooperation) development and implementation of the Post-Closure Agreement.
<b>6. Property</b>		
6.1 MMCIC may delay acceptance of one or more of the site parcels from DOE (e.g., indemnification issue).	High	Aggressively pursue cooperative relationship with MMCIC to minimize likelihood of unexpected responses when DOE offers a parcel for conveyance.
6.2 Significant resources may be required to support the upcoming real estate transactions, as well as to identify and inventory real estate records. However, there are limited personnel who are qualified to conduct real estate transactions for DOE EM and LM.	High	Solicit the support of qualified personnel from other sites (e.g., the Hanford Site) and identify lessons learned from other sites to develop more efficient processes.
6.3 The requirements of the existing EM closure contracts may not adequately address the need to preserve real estate records required for post-closure.	Medium	EM Contracting Officer proactively identifies and communicates to real property records needs/requirements for post-closure to EM contractor.
<b>7. Worker Pension and Medical</b>		
7.1 The EM contractor is required by contract to manage and administer the legacy medical and pension plans until EM completion. During a recent actuarial and legal evaluation, CH2M Hill estimated that an additional \$19.9M might be required (life cycle) beyond what is currently included in the contract because of poor performance of the stock market. As specified in the contract, the EM contractor only has partial responsibility for any shortfall up to EM completion, the extent of which depends upon whether the EM contractor meets the completion deadline of March 2006. In the past, if a shortfall occurred, it was typically addressed by shifting funds from the cleanup appropriation. If this occurs, the transition schedule would likely be adversely affected.	Medium	Pursue supplementary funding for legacy medical and pension cost growth
<b>8. Procurement</b>		
8.1 LM may not have contractual mechanisms in place soon enough to support key activities (e.g., maintaining the groundwater monitoring	Low	EM may consider having contractual mechanisms in place (e.g., through Richland) or LM may provide

<b>Exhibit 4-2. Potential Programmatic Risks</b>		
system, operating the pump and treat) during the period between physical completion (3/30/06) and turnover to LM (9/30/06).		contingency.
<b>9. Project Closeout</b>		
9.1 The CD-4 closeout package may not be approved by the Office of Engineering and Construction Management by September 30, 2006.	Low	Work cooperatively with EM to ensure that CD-4 package is complete, is on time, and meets requirements.

#### **IV. RISK REDUCTION Mitigation PLAN**

DOE will take proactive actions to reduce or eliminate the DOE risks to ensure that they are mitigated and do not affect MCP's ability to achieve EM completion and transition of long-term response action management requirements to DOE-LM on 10/1/06. For each of the major DOE risk items, the plan includes the quantitative and qualitative risk assessment data for cost and schedule, the risk reduction actions, the action owner, the interim completion dates and the not to exceed date driven by baseline requirements. The interim completion dates may either be driven by the baseline or the accelerated working schedule as provided by the contractor. This action plan will be aggressively worked by DOE project managers to ensure completion on time and will be statused each month to the Project Director. Negative variances to this plan should be the exception to the rule. Aggressive action will be taken to recover any negative variances quickly. This plan is under change control and can only be modified by the Director.

The action plan will be evaluated at least quarterly to update as necessary. Changes that occur during the quarter will be under change control by the Director.

## **V. RISK REDUCTION PERFORMANCE METRICS**

DOE-MCP has established a series of performance metrics to measure and communicate the effectiveness of risk reduction efforts against the strategies and Tactical action plans in this volume. Significant and measurable reductions to the initial risk profile are necessary over the life of the project to ensure that MCP can achieve EM completion and transfer site custodian ship to DOE-LM on 10/1/06. Acceleration of risk reduction will support early completion of the project.

These metrics will be statused by DOE-MCP monthly and communicated within DOE and to external organizations frequently.

The following metrics will be statused by DOE-MCP:

- LLW Soil volumes – Plan versus Actual
- Cost of Legacy Medical and Pension – Planned versus Actual.
- GFS/I – Planned versus Actual
- Risk Reduction – Planned versus Actual.
- DOE Cost Risk Reduction – projected worst-case cost of DOE risk versus actual reduction over time.