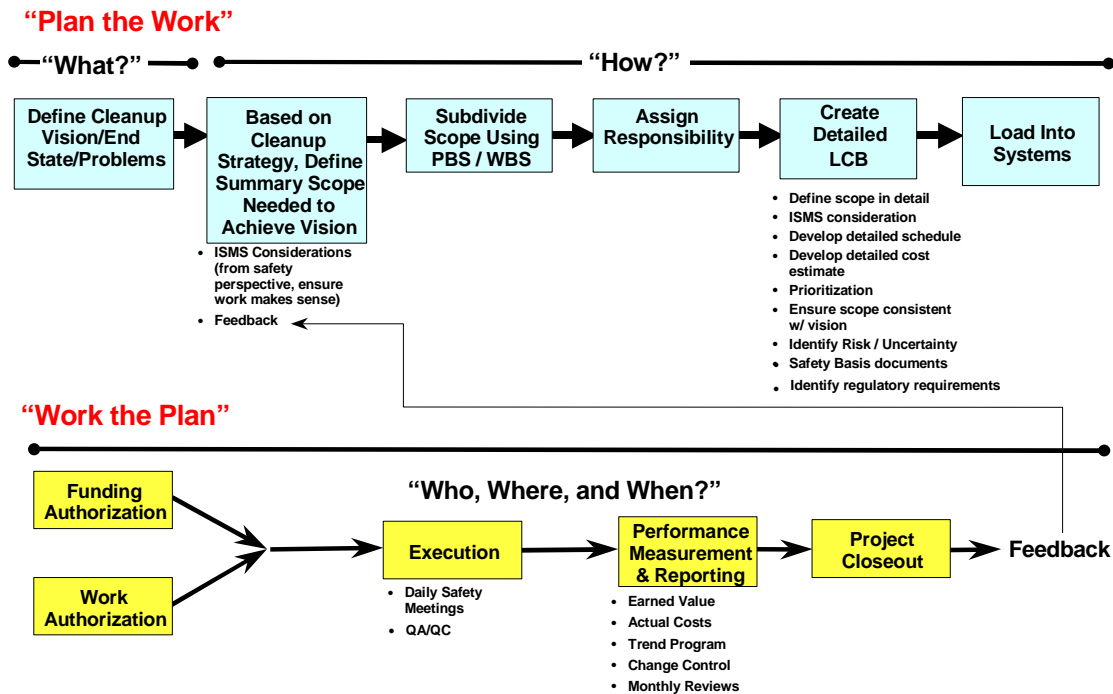


## MANAGEMENT FRAMEWORK

To ensure that closure work stays on schedule and within cost, we use state-of-the-art project management system tools. This chapter describes how these tools guide management of the work and provide a system that supports accurate reporting to stakeholders.

A well-established and understood project controls system takes the cleanup vision and, based on the programmatic strategy, subdivides the work into manageable projects. These projects are assigned to Project Teams, who craft detailed life cycle baselines consisting of scope statements, schedules, and cost estimates. After loading this information into the project control systems, DOE authorizes and funds work according to the required sequence as dictated by the closure execution logic. The Project Team then executes the work. The performance measurement and reporting process tracks actual versus projected progress and cost and establishes when corrective actions are needed.

### Project Management System Approach



In addition to periodic performance measurement during the project, a project feedback loop exists as a part of project closeout and ensures that the project results are factored back into up-front planning. This is important to confirm that the strategy is in fact working or provide sufficient information to warrant changing the strategy.

## BASELINE MANAGEMENT

A project management system is in place that provides integrated baseline management of scope, budget, schedule, and financial data to document plans, progress, expenditures, and funding. It also uses a well-understood planning and budgeting process; performance analysis and trending; project reviews; and timely, consistent, and accurate reporting.

The project management system principles endorsed by DOE Order 413.3, “Program and Project Management for the Acquisition of Capital Assets,” are in place to govern project management practices such as earned value, cost and schedule performance using approved life-cycle baseline and work breakdown structure, critical path schedules, risk assessment and mitigation, and configuration management and control.

In addition to the traditional systems used to manage baseline cost, schedule, and scope, a structured process is being developed to assure that the actions outlined in the Responsibility Assignment Matrix (Appendix A) are tracked through completion. There are two mechanisms that will be used to accomplish this objective. First, the integrated project schedule will include specific schedule activities from the Responsibility Assignment Matrix (Appendix A), including the Government-Furnished Services and Information (Appendix B). This will assure that the status of these actions is accurately tracked by the DOE and Project Teams and receives management visibility and attention during monthly reviews. Monthly tracking of the status of each action using the integrated schedule will provide an early warning if these activities slip.

The second mechanism will be active management of the Responsibility Assignment Matrix. It will be updated regularly and will be under configuration control. The status of each step in the Responsibility Assignment Matrix will be updated monthly to facilitate management attention and to plan corrective measures that are necessary to keep the work on schedule.

A detailed Lifecycle Baseline is being updated to document the detailed plan for closure. The baseline represents the collective scope, schedule, and budget for all subprojects that are prioritized and sequenced by year using construction logic. It will include both contractor and DOE scope and accountability. The overall schedule and budget profile will be used to identify interim closure milestones for tracking progress against contractual and regulatory commitments. The subproject scope statements serve as the heart of the Lifecycle Baseline by providing a basis for the cost estimate, the critical path schedule, performance metrics, Integrated Safety Management System analysis, and the waste generation forecast that facilitates planning for the EMWMF, Nevada Test Site, and other waste treatment, storage, or disposal sites.

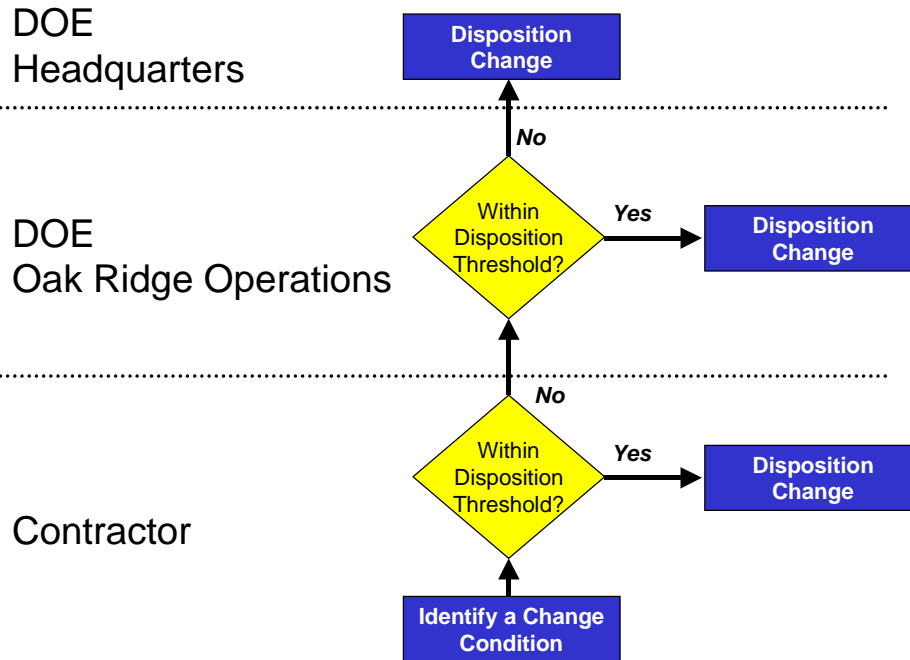
The systems used to ensure that closure work is under financial and managerial control are currently in place, and project teams are familiar with their use. The current project controls system will be used to provide cost and schedule performance using an earned value approach for monitoring actual performance against planned accomplishments. This system provides real time information to management as to which projects are over cost, which projects are under cost, which projects are ahead of schedule, and which projects might be behind schedule. Management can use this information to apply additional resources or other work-around for those projects that are behind, and the system provides notice that those projects that are ahead may be able to liberate funding that can be applied to new work. In fact, the critical path schedule will indicate which projects would provide the greatest opportunity for acceleration given the availability of unused funding.

In addition, the critical path schedule will distinguish between those activities that are constrained by execution logic and those activities that are constrained by funding. Any activity that is on the critical path and is also funding constrained would be the first priority to receive additional funding.

## **CHANGE MANAGEMENT**

Scope changes are handled under the change control process (as shown below) that gives early notification and approval authority for pending changes—with no surprises. Notification and involvement by all participants expedites the decision-making process and mitigates impacts on

schedule or associated budget caused by delay in change resolution. The EM contractor standardizes and integrates business management, technical support, and safety systems across all projects, providing the ability to control cost and schedule and to manage change. Any change proposal that exceeds a dollar threshold, impacts a regulatory milestone, or changes an incentive fee performance agreement will require DOE Oak Ridge Operations approval.



**Change Control Process**

## FUNDING

The current EM Program funding appropriations for the Oak Ridge Reservation are from multiple funding sources. These sources include Defense (EW02), Uranium Facilities Maintenance and Remediation (EU02—the Decontamination and Decommissioning Fund), Other Uranium Facilities Maintenance and Remediation (EU01—former Uranium Programs), and Safeguards & Security (FS30). Numerous Project Baseline Summaries are used to allocate funding from these sources to the EM work in Oak Ridge. The appropriation language is specific in terms of the scope to be funded under each of the different sources.

Continuation of multiple funding sources under the accelerated closure approach will present constraints, which must be recognized in planning and execution of the Closure Plan. A single funding source or at least minimizing the number of funding sources to be used for execution of the Closure Plan would simplify execution.

A proposed restructuring of the Project Baseline Summaries for the Oak Ridge Reservation is being developed for submittal to DOE-Headquarters. A revised Project Baseline Summary structure is appropriate to better align with the execution strategy outlined in the Closure Plan.

The funding profile to support the March 2002 Comprehensive Closure Plan Proposal identified a need for increased stable funding to accelerate mortgage reduction opportunities and reinvest the savings into accelerated cleanup work. The target cost and closure dates for the accelerated funding profile will be determined when the Lifecycle Baseline has been updated. Once the scope of work for each project is finalized and the estimates and duration for each project are completed, the work will be sequenced according to the final approved outyear funding profile.

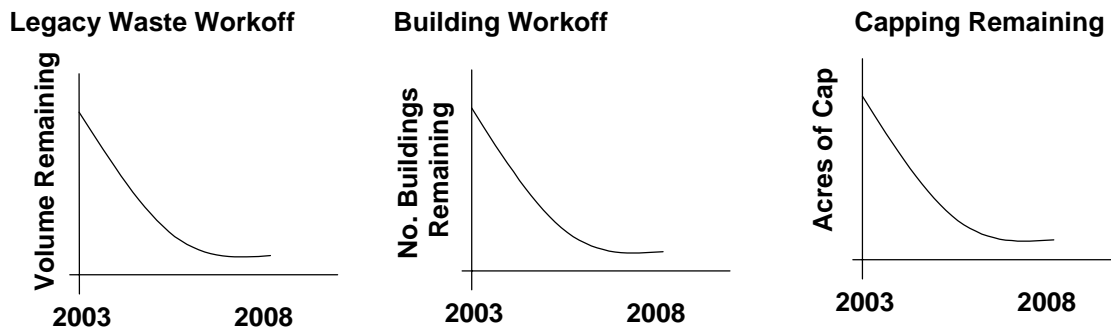
## PERFORMANCE MEASURES

To ensure that closure work stays on schedule and within budget, standard performance measures will be used. These performance measures track primary scope associated with near-term closure work necessary for accelerated closure in FY 2008. The three categories of performance measures include:

- Earned value (budgeted cost of work performed);
- Interim milestones; and
- Physical performance metrics.

Earned value provides the most comprehensive mechanism to track the overall progress and percent complete against the baseline plan. Interim milestones will include the enforceable milestones listed in the Federal Facility Agreement. Appendix E of the Federal Facility Agreement contains specific completion dates for a 3-year window while Appendix J will contain non-enforceable milestones through completion.

Physical performance metrics will be developed to address the key elements of closure scope including demolishing buildings, dispositioning legacy waste, and capping burial grounds. Since the inventory of each of these is known, quantity workoff charts will be maintained to assess closure status. The following metrics highlight 2008 simply to put a heightened focus on higher priority near-term work.



**Performance Measures**

## ROLES AND RESPONSIBILITIES

The following section highlights key roles and responsibilities of the federal and contractor program managers on the Project Team. Responsibility and accountability for closure success go hand-in-hand.

## **Federal Program Manager**

The Federal Program Manager will:

- Take ownership of the Comprehensive Closure Proposal,
- Develop the acquisition strategy for securing the implementing contractor,
- Serve as the primary advocate for project strategy and required resources consistent with this plan,
- Resolve policy issues with DOE Headquarters,
- Provide Government-Furnished Services and Information according to the schedule,
- Partner with regulators to ensure a collaborative, positive working relationship,
- Establish clear expectations for safety and Integrated Safety Management System implementation,
- Work with EM-1 to resolve integration issues with other sites (e.g., Idaho National Engineering and Environmental Laboratory, Nevada Test Site),
- Performance trending and tracking,
- Establish performance standards and metrics for the conduct of work,
- Approve baseline change proposals within threshold,
- Provide oversight of and offer constructive feedback to contractors, and
- Ensure that directions/modifications to all prime contractors are integrated with the closure milestones.

## **Contractor Program Manager**

Key roles associated with the Contractor Program Manager include:

- Front-line accountability for safe work performance;
- Accountability for day-to-day closure performance;
- Accountability for alerting the collective project team about current and upcoming issues that must be solved;
- Accountability for scope, schedule, and cost performance; and
- Approval of baseline change proposals within threshold.

## **RISK MANAGEMENT**

As with any large program there are sources of uncertainty and risk. The Oak Ridge EM Program approach is to identify these sources, understand the key components driving the uncertainty, and then implement controls and countermeasures to minimize adverse outcomes. The sections below describe the major components of uncertainty and how the Oak Ridge EM team manages them.

## **Programmatic**

This category of risk includes factors that can affect all projects within the closure scope. Risk Factors include:

- Funding levels;
- Unfunded mandates;
- Legacy worker compensation claims;
- Transition of management of newly generated waste to Office of Science and National Nuclear Security Administration;
- EM acceptance of transition facilities from Office of Science or National Nuclear Security Administration;
- Reaching consensus with regulators; and
- New requirements from changes in DOE Orders, laws and regulations.

Each of these programmatic risk elements is associated with items outside the control of DOE Oak Ridge, or items that are key assumptions in the plan. For instance, if the Oak Ridge EM Program receives less funding or is required to fund items such as the Legacy Workers Compensation Claims, then it is likely that the completion schedules will be impacted. Similarly, if EM is required to accept transition facilities from Office of Science or National Nuclear Security Administration without a corresponding increase in funding, the schedule is at risk.

## **Technical**

This category of risk includes uncertainty associated with the technical scope, including the method of accomplishment. Risk factors include:

- Unknown conditions discovered during pre-design investigations;
- Effectiveness of in situ vitrification at Melton Valley;
- The characterization of waste for disposal;
- The effectiveness of source control actions;
- The soil remediation levels at ETPP;
- Availability of disposal outlets, including and outlet for K-25/K-27 Buildings converters; and
- Burial ground excavation with limited characterization data.

Each of these technical risk elements is associated with project uncertainties that will have to be monitored carefully as the projects develop. The baseline provides a structured process to capture key project uncertainties, assesses the likelihood of occurrence, and the degree of impact. These identified risks will be managed at all levels of the organization, including senior management in our monthly reviews. Risk mitigation plans will be developed for those activities with a high probability of occurrence and a high degree of impact.

## **REQUIREMENTS MANAGEMENT**

Throughout the execution of the closure program, there will be revisions to laws, regulations, and DOE Orders and guidance. A streamlined national process is needed for managing the new and changed requirements. This process needs to provide a complex-wide EM perspective on the applicability of new requirements to ensure consistent interpretation and application and maintain EM's focus on closure. As an example, when a DOE Order is revised or initially issued, EM could provide an assessment on the applicability and value-added by the Order to EM field work. Those Orders that are deemed applicable and value added would be accompanied by an EM implementation interpretation when distributed to the sites. In addition to accelerating needed Order implementation, it would enhance consistency and standardization.

To ensure up-front agreement and understanding on the method of compliance for implementation of existing DOE Orders and requirements, an Order Compliance Matrix will be inserted into the prime contract of the EM remediation contractor. That Matrix will list requirements and the intended method of compliance.

## **CONTRACTING APPROACH**

Oak Ridge Operations envisions a closure contract for completion of the work identified in this Performance Management Plan. The contract would tie cost and schedule fee incentives to the closure milestones, and it would set the expectations for environmental safety, and health performance.

## **SUBCONTRACTING APPROACH**

Contractor decisions whether to subcontract or self-perform cleanup work will be made on a case-by-case basis. This will provide needed flexibility to balance labor resources, subcontractor resources, and time. The preponderance of subcontract support will be competitively procured fixed-price and fixed-unit-rate subcontracts based on well-defined, performance-based scopes of work.

One of the major features of the procurement process is that safety is explicitly integrated with each element of the process, thereby helping to procure subcontractors that share the Contractor's culture for zero accidents and exemplary safety performance. A safety expert from the Contractor's Environmental Safety and Health organization is assigned to each contract during the procurement stage. This specialist develops specific safety requirements based on the work scope and anticipated hazards, helps pre-screen bidders for past safety performance, describes the team's safety culture during pre-bid meetings, and conducts a safety kick-off with the winning bidder before the work begins. A safety advocate is assigned to oversee the subcontractor's safety performance and resolve safety-related issues.

The current EM Contractor is in the process of implementing an innovative approach to procurement called "reverse auction" where appropriate. The reverse auction uses on-line electronic software that provides bidders the opportunity to bid against each other and have real time knowledge of their relative standing during the competition. This tool facilitates real time market conditions and maximizes competitive pricing. The Contractor is identifying appropriate procurements for reverse auction.

## **PUBLIC PARTICIPATION**

Consistent with the “Public Participation Plan for CERCLA Activities at the U.S. Department of Energy Oak Ridge Reservation”, we are committed to public participation in both pre-record of decision and post-record of decision work. This work includes land use control planning, remedial effectiveness evaluation, and long-term stewardship planning.

As part of the public participation plan for the Performance Management Plan, drafts were made available for public review, a public meeting was held, and comments received to date have been considered. A responsiveness summary will be available in August, and ongoing dialog with the public will be maintained.

Proposed Oak Ridge Performance Management Plan approved by the Assistant Secretary for Environmental Management, Jessie Roberson, submitted to the Office of Management and Budget as EM request, August 2002.

This document has been approved for release to the public by the Classification and Information Control Office at East Tennessee Technology Park.