



Department of Energy
Washington, DC 20585

August 7, 2009

MEMORANDUM FOR DISTRIBUTION

FROM:


INÉS R. TRIAY
ASSISTANT SECRETARY FOR
ENVIRONMENTAL MANAGEMENT

SUBJECT:

EM Acquisition and Project Management Corrective Action Plan

The Environmental Management Program has committed itself to extensive management reforms and is in the midst of a robust improvement in government project and contract management. EM is implementing measures targeted at project and contractor performance, including integrating safety earlier into design, starting construction after 90 percent design, dividing large programmatic work into smaller discrete projects, conducting readiness assessments to ensure technology maturity, performing monthly senior management reviews for projects at risk, evaluating contractor construction project management and technical capabilities, performing comprehensive construction project status reviews, and deploying a new project management information system for analysis of project performance. The successful implementation of these measures requires improvement in the following: headquarters and field coordination, well-defined corporate functions, improved communications and outreach, and more timely and accurate project and contract status reporting. Collectively, these are all EM priority areas directed at enhancing EM management and federal oversight of projects and ultimately improving the cost and schedule performance of these projects.

The attached EM Acquisition Management and Project Management Corrective Action Plan is a consolidated and integrated summary of completed and ongoing initiatives directed at producing real, measurable, and sustainable continuous performance improvement. This document establishes the EM vision, goals, strategies, performance metrics, and specific actions completed or being undertaken to improve acquisition and project management performance. Moving forward, EM will continue to undertake initiatives to improve acquisition and project management. As a result of these and other initiatives, the EM CAP will be updated as appropriate.

I appreciate your continued support to improve EM's acquisition and project management performance. Should you have any questions or comments, please contact Mr. J. E. Surash, Deputy Assistant Secretary for Acquisition and Project Management, at 202-586-6382.



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EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

Acquisition and Project Management Corrective Action Plan

**U.S. Department of Energy
Office of Environmental Management**

August 2009

APPROVALS

Office of Environmental Management

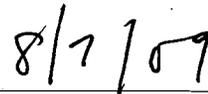
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Assistant Secretary for Environmental
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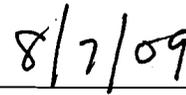


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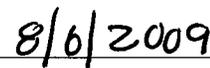


Date



J. R. Surash

Deputy Assistant Secretary for Acquisition
and Project Management, Office of
Environmental Management



Date

Executive Summary

Since the Office of Environmental Management (EM) was established within the U.S. Department of Energy (DOE) 20 years ago, both DOE and EM have been routinely scrutinized for their management of contracts and projects. Because most of EM's work is accomplished through the use of contracts, the acquisition management and project management functions have been regular targets for internal and external reviews, similar to other agencies with major cost reimbursement contracts. These reviews have produced several significant recommendations which, after implementation, have resulted in measurable performance improvement. EM senior management has committed itself to extensive management reforms and is in the midst of a robust improvement in government project and contract management. This document establishes the EM vision, goals, strategies, performance metrics, and specific actions completed or being undertaken to improve contract and project management performance.

In 2006, the National Academy of Public Administration (NAPA) began a study of EM, which included acquisition and project management among its key focus areas. The resultant report, "Managing America's Defense Nuclear Waste," was published in December 2007. The NAPA Panel, a government-wide recognized expert, noted that its study was taking place in the wake of program modifications to the acquisition and project management process. In the report, the NAPA Panel recommended complimentary improvements including standardization and integration of project performance management tools across the complex, use of project-specific success metrics, evaluation of the existing project contingency policy, and use of case studies as a training tool. All of the NAPA recommendations complimented the ongoing changes and stepped up the impetus to move forward in implementation.

In February 2007, EM partnered with the U.S. Army Corps of Engineers to establish the enhanced capabilities and transform EM into a "Best-In-Class" project and contract management organization. Assessments were conducted across sixteen EM sites using twelve management criteria specifically designed to assess project and contract management capabilities as well as how DOE-EM projects and sites actually function. Those assessments were completed in October 2007, and the associated Best-in-Class (BIC) Corporate Implementation Plan (CIP) was completed in March 2008. Through the CIP, EM is implementing improvements in project controls, baseline management, cost estimation, change control, schedule management, acquisition strategy and planning, contract change order management, and business clearance reviews. Some of the actions being taken include:

- Restructure the EM Portfolio—EM is rigorously applying the project management principles and processes outlined in DOE Order 413.3A, Project Management for the Acquisition of Capital Assets (DOE O 413.3A) to both construction and cleanup projects. EM has established a project structure and control system for all its work, including a

total of 76 projects, 14 construction and 62 cleanup projects organized by site and activity. EM has recently initiated further restructuring of the EM cleanup projects into smaller, more definitive capital and non-capital asset projects. This new structure will more succinctly align capital asset acquisitions with Federal and Departmental asset management requirements.

- Revisit the Acquisition Strategy/Standardize the Acquisition Process—A new EM Acquisition Center has been established. EM has created a standardized process with better delineation of roles and responsibilities, more focused contracting resources and expertise, clearer expectations, and improved guidance throughout the EM Program.
- Enhance Acquisition Personnel Capabilities—EM has focused on professional certification of acquisition personnel through the Acquisition Career Management Program (ACMP). The ACMP is a career management program established to provide a formal structured approach to career development for DOE's acquisition workforce. The ACMP is designed to increase proficiency of the acquisition personnel through competency-based training, experience, and Federal Acquisition Certification. EM is working to ensure all acquisition professionals, including designated contracting officers, receive the appropriate training and required certification in the appropriate career fields through the ACMP.
- Improve Project Management Personnel Capabilities—EM also supports the development and maintenance of project management expertise through the DOE-wide Project Management Career Development Program (PMCDP). The emphasis in the PMCDP curriculum is to increase the rigor in competencies and certification requirements, improve the training of requirements, increase the number of personnel put through the program, and ultimately improve the qualifications and performance of EM Federal Project Directors and other project management personnel.

The successful completion of the BIC CIP will result in increased Federal ownership of EM projects, standardization of EM processes, clear communication of requirements and policy to EM personnel, and the identification and institutionalization of best project and contract management practices across the EM complex.

In addition, as part of an effort to translate the project and contract management reforms to the Departmental level, a detailed analysis of the root causes contributing to less than satisfactory project performance was conducted by DOE personnel responsible for managing project and contracts. DOE started the Root Cause Analysis (RCA) in October 2007, completed the RCA Report in April 2008, and issued a Corrective Action Plan (CAP) in July 2008. EM was intimately involved in the RCA and remains actively engaged in CAP support including implementation of the eight corrective measures.

In 2009, EM began implementing additional measures targeted at project and contractor performance, including integrating safety earlier into design, starting construction after 90 percent design, dividing large programmatic work into smaller discrete projects, conducting readiness assessments to ensure technology maturity, performing monthly senior management reviews for projects at risk, evaluating contractor construction project management and technical capabilities, performing comprehensive construction project status reviews based on the successful model used by the DOE's Office of Science, and deploying a new project management information system for analysis of project performance. The successful implementation of these measures requires improvement in the following: headquarters and field coordination, well-defined corporate functions, improved communications and outreach, and more timely and accurate project and contract status reporting. Collectively, these are all EM priority areas directed at enhancing EM management and federal oversight of projects and ultimately improving the cost and schedule performance of these projects.

Moving forward, EM will continue to undertake initiatives to improve project and contract management. As a result of these and other initiatives, EM has consolidated all ongoing acquisition management and project management improvements, including those stemming from the Government Accountability Office (GAO)¹, the Secretary's Root Cause Analysis Corrective Action Plan², the Best-in-Class initiative³, the National Academy of Public Administration Report⁴, and EM-generated improvement initiatives into this comprehensive corrective action plan (CAP) that includes performance metrics and completion milestones. This CAP will be updated as appropriate.

EM has adopted the GAO framework to organize and structure acquisition and project management improvement initiatives in response to the self-identified gaps as well as those identified by external organizations such as GAO and NAPA. The *EM Acquisition Management and Project Management Corrective Action Plan* is a consolidated and integrated summary of completed and ongoing initiatives directed at producing real, measurable, and sustainable continuous performance improvement.

The EM CAP is aligned with the overall DOE CAP published in July 2008. As such, the EM CAP includes all the performance goals, metrics, and targets in the DOE CAP as well as a few additional metrics. The EM CAP also includes all eight of the corrective measures included in the DOE CAP. The intent is for the EM CAP to include all elements of the DOE CAP as well as some additional improvements being undertaken specifically by the EM Program. In addition, the EM CAP also establishes the EM vision of becoming a best-in-class contract and project management organization, including supporting strategies and improvement initiatives.

¹ Government Accountability Office Report, GAO-08-1081, August 2008.

² Department of Energy Root Cause Analysis Corrective Action Plan, July 2008.

³ Office of Environmental Management Best-in-Class Initiative, 2006 – 2007.

⁴ National Academy of Public Administration Report on DOE Environmental Management Program, 2007.

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1.0 Introduction

EM leadership and the entire organization are committed to the continuous and sustainable improvement in contract and project management. This document establishes the EM vision, goals, strategies, performance metrics, and specific actions completed or being undertaken to improve contract and project management performance.

EM Contract and Project Management Vision

The EM vision for contract and project management is to be recognized as a best-in-class organization with strong leadership; effective plans, policies and procedures; a qualified and capable Federal workforce; and valuable knowledge and information management systems.

EM Performance Goals

The EM vision will be attained by achieving the following overall performance goals.

Capital Asset Line Item Projects: Capital asset line item projects will be completed at Critical Decision 4 within the original scope baseline and within 10 percent of the original approved cost baseline (Critical Decision 2), unless otherwise impacted by a directed change.⁵ Baselines impacted by a directed change will have adjusted baselines established. On a program portfolio basis, 90 percent of EM line item projects will meet the project success definition benchmark.⁶

EM Cleanup (Soil and Groundwater Remediation, D&D, and Waste Treatment and Disposal) Projects: EM cleanup projects will be completed by achieving at least 80 percent of the defined near-term baseline end state scope (Critical Decision 2) with less than a 25 percent cost variance from the original approved baseline, unless impacted by a directed change. On a program portfolio basis, 90 percent of EN cleanup projects will meet the project success definition benchmark.⁷

The aforementioned goals are included as overall performance metrics in Section 3.0 of this document. In addition, there are 18 additional performance metrics that EM will use to measure performance and progress in improving contract and project management.

⁵ Directed Change: Changes, as validated by the DOE Office of Engineering and Construction Management, caused by DOE Policy Directive, Regulatory, or Statutory action. Directed changes, with the exception of policy directives, are changes that are caused by entities external to the Department, to include external funding reductions. (Directed change decisions will be reviewed and validated by OMB periodically.)

⁶ This category includes capital asset projects being executed as line item construction projects and miscellaneous minor new program-specific or general construction projects whose total estimated cost is equal to or greater than the threshold of \$10 million for General Plant Projects and Institutional General Plant Projects.

⁷ This category includes capital asset projects being executed as cleanup projects. This involves the construction phase of environmental restoration (i.e., soil and water remediation) and facility decommissioning and demolition. In accordance with the DOE CAP commitment to revisit the performance metric for EM cleanup projects, EM is currently reviewing this metric. A proposed revised metric will be completed by 9/30/09.

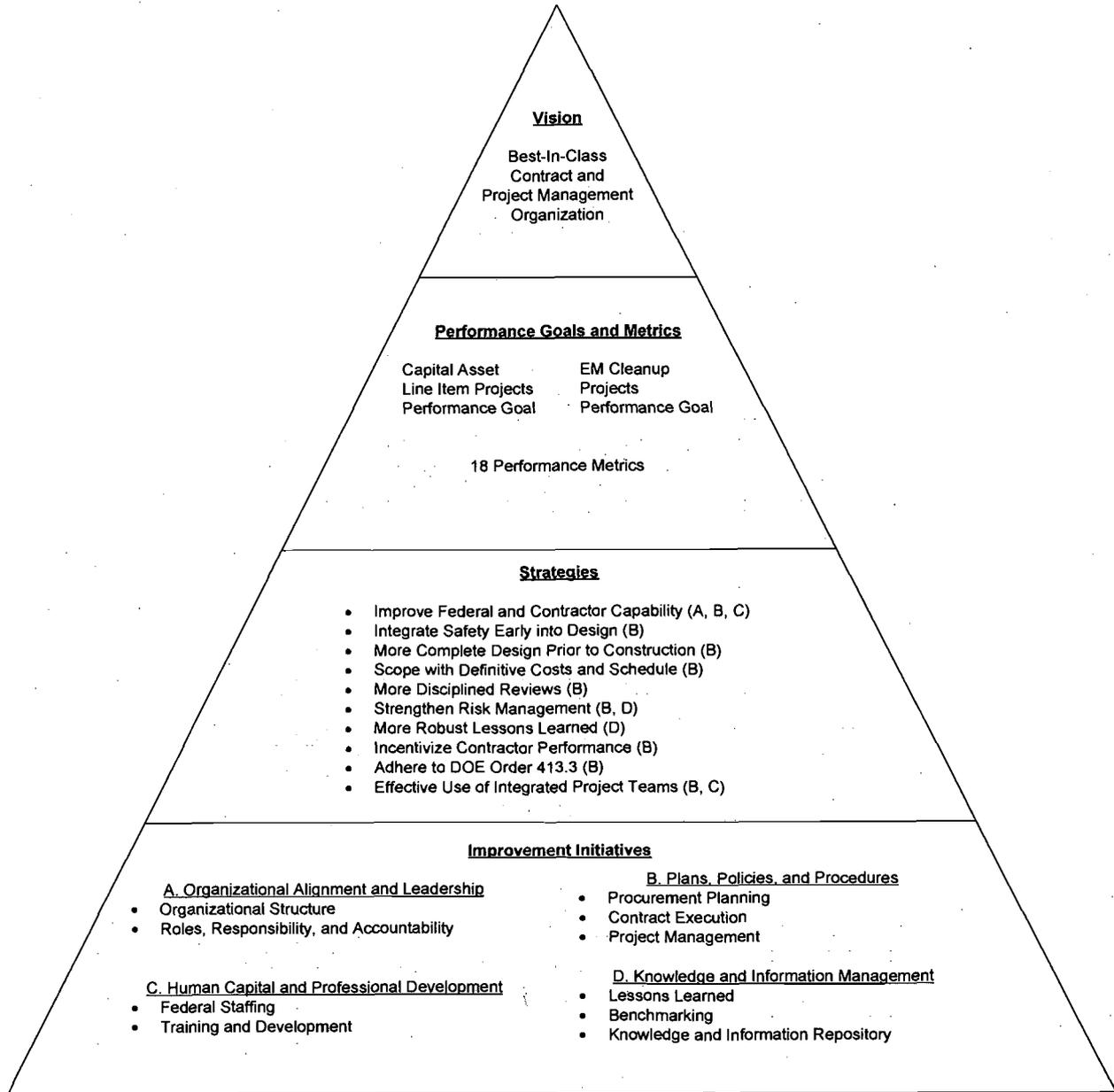
EM Contract and Project Management Strategies

EM will achieve the performance goals mentioned above by executing the following strategies.

- Strategy 1 Improve the capability of the Federal and contractor workforces
- Strategy 2 Establish safety requirements earlier in design
- Strategy 3 Complete design at 70 – 90 percent before the start of construction
- Strategy 4 Define project scope that has a definitive cost and schedule
- Strategy 5 Implement more disciplined reviews for the early identification and resolution of issues
- Strategy 6 Strengthen risk management including more robust practices to identify and mitigate risks
- Strategy 7 Develop and implement a more structured lessons learned process
- Strategy 8 Develop and oversee contracts that incentivize contractor performance
- Strategy 9 Adhere to DOE Order 413.3 program and project management for the acquisition of capital assets
- Strategy 10 Establish and use more effectively Integrated Project Teams

Each of the above mentioned strategies will be accomplished through the completion of a number of EM improvement initiatives. These specific improvement initiatives are included in Appendix A. Table 1-1 summarizes the relationship between EM's vision, performance goals, strategies, and improvement initiatives.

Figure 1–1. Integration of EM contract and Project Management Vision, Performance Goals & Metrics, Strategies, and Improvement Initiatives



2.0 Acquisition and Project Management Improvements

EM is committed to sound acquisition and project management. Over the past several years, EM has placed a priority on improving program performance. This includes supporting completion of several internal and external reviews, committing to establishing Best-in-Class reform initiative, and making substantive changes to management systems and organizational structures.

The internal and external reviews of the EM program have produced recommendations associated with the following: developing and improving policies, protocols, guidance, and web information for EM project and contract management; developing and improving tracking systems, project and contractor performance data quality, and project outcomes; improving federal oversight of projects and contractors; and improving processes and documentation of project Critical Decisions, award of new contracts, and processing of contract renegotiations.

Two of the four study areas in the NAPA review were acquisition and project management. The NAPA panel conducted a management review and provided recommendations for significant structural and organizational alignment improvements in acquisition as well as project management, including standardization and integration of project performance management tools across the EM complex and implementation of Best-in-Class project management standards.

As a result of the observations and recommendations from the reviews noted herein as well as greater EM management emphasis on acquisition and project management, several performance improvement initiatives have been completed or are currently in progress. The EM acquisition and project management performance improvement initiative is focused on improving federal staffing, integrating project management and contract management, developing a project-oriented culture, maintaining project baselines, and implementing DOE O 413.3A more consistently.

EM has recognized the need to improve its acquisition and project management processes and performance. As such, EM has undertaken numerous actions. The following represents a summary of the initiatives being undertaken by the EM organization.

Ensuring EM has the Best Contractors and that EM Performs Strong Contract Management

More than 90 percent of EM's work is performed by prime contractors who are under contract to DOE to execute projects on schedule and within cost. Until the early to mid 1990s, the EM sites had been operational nuclear production sites and were managed by large Management and Operating contracts on a best-efforts basis. EM implemented new contract strategies by moving to cost-plus incentive fee and cost-plus award fee contracts. Currently, EM activities are being conducted through more than 40 prime contracts with a total value of more than \$40 billion.

Thus it is imperative that once a contract is awarded, EM exercises strong contract management. To accomplish this:

- EM is awarding smaller, more-focused contracts. At our largest sites, Hanford and Savannah River, work previously performed by 3 prime contractors will now be performed by 5 prime contractors. Each of these procurements underwent strong competition from a field of talented companies. Four of the five contracts that were successfully awarded have been to new prime contractors rather than the incumbents.
- EM-HQ received \$50 million Head of Contracting Activity authority, allowing for additional delegated authority to EM sites (from \$5 million to \$25 million).
- EM is implementing enhanced oversight of its contractors. Overall contract strategy is performed at EM HQ; contract execution is performed at each EM site under the leadership of the site manager. EM site managers are enhancing their capability to proactively manage contracts.
- At the Savannah River Operations Office, the Site Manager has increased overall staffing to provide additional contractor oversight and has combined contract administration functions including contract management, personal property management and contractor industrial relations under a new Office of Acquisition Management. In addition, a new Office of Integration and Planning, led by a senior executive certified as a Federal Project Director, is providing project management expertise to project teams in cost estimating, project controls, risk management and scheduling.
- At Hanford's Richland Operations Office, the office has increased from 245 employees to 275 to enhance oversight with the additions mainly in the project management and contracting officer disciplines. The Project Integration and Control organization built up a Federal capability in scheduling, estimating, and other project support functions. Each cleanup project has an integrated project team led by a certified Federal Project Director supported by a certified contracting officer and project and technical professionals.
- At Hanford's Office of River Protection, the Site Manager established independent Engineering, Procurement, and Quality Assurance organizations. The integrated project teams overseeing the construction of the Waste Treatment Plant were strengthened. The overall federal staff level has been increased from 95 to 145.

Proper Planning and Management of EM Cleanup Projects

One of the recurring criticisms of the GAO is that EM projects have had cost increases and schedule delays due to poor planning, failure to follow DOE guidance, and ineffective project reviews. In the past, many EM projects were planned based on overly optimistic technical, regulatory, and funding assumptions. That practice placed EM in a position of not being able to complete projects as planned. EM recognized these weaknesses and has been undertaking several initiatives to rectify them. These initiatives have incorporated lessons learned from EM's many successful projects. Notably, the Rocky Flats and Fernald Closure Projects were awarded the Project Management Institute's Project of the Year in 2006 and 2007, respectively. The award represents the highest recognition given by this renowned, world-wide organization of 275,000 project management professionals. GAO recognized the importance of the Rocky Flats

success and the necessity of sharing the lessons learned in two of its reports (2005 and 2006). Accordingly, several EM planning and management improvement initiatives include many of the lessons learned and include:

- Re-planning the entire EM cleanup projects portfolio (over \$150 billion) in 2007 and 2008. This resulted in new independently reviewed and certified scope, schedule, and near-term execution baselines including documented assumptions and an associated risk management plan, for each cleanup project.
- Establishing requirements and certifying contractors' Earned Value Management Systems (EVMS) to be American National Standards Institute compliant.
- Implementing a standardized earned value management analysis process.
- Increasing the frequency of EM senior management reviews with the prime contractor and Federal staff from quarterly to monthly. This allows the Federal Project Directors to leverage senior EM leadership so that execution issues can be quickly resolved to keep projects on track.
- Restructuring contracts to better align fee and performance.
- Challenging the prime contractors to provide the requisite and expected capability so that EM projects are staffed with the "A-teams."
- Implementing the Department of Defense and National Aeronautics and Space Administration Technology Readiness Levels to judge the relative maturity of new technologies prior to approving full-scale development.
- Implementing External Technical Reviews to ensure timely resolution of engineering and technology issues early in the project's development.
- Establishing a cost-estimating Center of Excellence at the EM Consolidated Business Center in order to improve the quality of the program's independent government estimates for its construction and cleanup projects.
- Completing an assessment of Federal oversight capability and are actively building capacity to ensure there are no gaps.
- Managing cleanup (i.e., operating dollars funded) projects using the principles contained within the DOE O 413.3A including earned value management.

Improving Management of EM Construction Projects

EM is managing five capital asset construction projects with an estimated total cost of nearly \$15 billion. Each of these projects is a first-of-a-kind, complex nuclear project. As with the cleanup projects, EM has instituted significant reforms so that these projects can be properly planned, designed, and constructed within cost and schedule. These reforms include many of the initiatives described above as well as:

- Leading the promulgation of DOE Standard 1189, "Incorporation of Safety into the Design Process," so as to integrate safety early into design in order to prevent the need to revise design criteria after facility construction is well under way. EM implemented the new Standard for EM nuclear construction projects and now conducts reviews to assure the adequacy of the safety basis strategy and associated design criteria.

- Adopting the highly regarded project review model developed by DOE's Office of Science. The first of these reviews was completed in early April 2009.
- Establishing an Office of Quality Assurance at Headquarters and increasing Federal and contractor quality assurance professionals at every field site. This is needed to ensure quality is incorporated into EM projects, thus avoiding cost increases and schedule delays. Federal quality assurance resources now account for almost 6 percent of the total EM employees head count, fitting within the industry range of 4 to 7 percent.
- Facilitating training sessions and supplier workshops attended by hundreds of large and small businesses alike in order to increase the cadre of vendors qualified to the high standards of nuclear quality assurance.

Increased Federal Project and Contract Management Oversight

NAPA clearly noted that the EM Program is insufficiently staffed to oversee its contractors' activities. The NAPA panel noted that other organizations with similar missions as EM, for example the Naval Facilities Engineering Command and the U.S. Army Corps of Engineers, have two to six times as many federal personnel overseeing cleanup work. In addition, they noted existing EM personnel need to have their skills enhanced to meet the demands of its program planning and oversight role. EM has aggressively moved to enhance the numbers and skills of its workforce with specific emphasis on contract and project management, safety, and quality assurance. These include:

- Training and certifying all Federal Project Directors and Contracting Officers through the Project Management Career Development Program (PMCDP) and the Federal Project Director Certification and Acquisition Professional Certification Programs. To date, nearly 90 percent of EM's projects are led by certified Federal Project Directors.
- Partnering with the U.S. Army Corps of Engineers to assess EM's project and contract management capabilities. This "Best-in-Class" assessment reviewed 12 key capabilities (e.g. compliance with DOE's project management order, cost estimating, scheduling, contract management) and determined that EM needed to increase its site personnel by 159 in a range of project and contract management disciplines. As of March 2009, EM has filled 116 (73%) positions using a combination of new Federal personnel hires, transferring existing Federal personnel, and deploying 50 contractor consultants to provide immediate assistance and mentoring as Federal hiring continues.
- Increasing its on board count during the past two years by approximately 300 people, from 1,370 to nearly 1,680, much of it in the areas of project and contract management, safety, engineering and quality assurance.
- Conducting rigorous case study lessons learned training and partnering with the Defense Acquisition University to gain understanding of how another major government agency (Department of Defense) develops and trains its executives in acquisition and project management.
- Developing and conducting acquisition course for EM executives designed to focus on contract management topics which are current and relevant within EM.

- Developing and delivering contract management roles and responsibilities training to teams of EM acquisition leaders.
- Supporting just-in-time training courses for Integrated Project Teams to increase Performance-Based Acquisition (PBA) awareness and implementation.

EM's improvement initiatives align with and complement other ongoing DOE contract and project management corrective measures, including improving project front-end planning; enhancing the Federal contract and project management workforce; improving project risk assessment, communication, and management; aligning and integrating budget profiles and project cost baselines; improving independent government cost estimates; improving acquisition strategies and plans; improving project oversight and management; and improving adherence to project management requirements.

Appendix A of this document includes a more detailed summary of the individual completed and ongoing acquisition and project management performance improvements.

3.0 Performance Metrics

The EM organization has two overarching primary metrics to monitor progress towards achieving success: the completion of capital asset line item projects and EM cleanup projects. Both performance metrics, defined in Table 3-1, are consistent with the metrics established in the Department’s contract and project management root cause analysis corrective action plan. In addition, in accordance with the DOE CAP, EM is currently reviewing and revising the EM Cleanup metric and will be proposing a revised metric by the end of FY 2009.

Table 3-1. Overall EM Acquisition Management and Project Management Performance Metrics and Targets					
Contract/Project Management Performance Metrics	FY 2008	FY 2009 Target	FY 2010 Target	FY 2011 Target	FY 2012 Target
Capital Asset Line Item Projects: Capital asset line item projects will be completed at Critical Decision 4 within the original scope baseline and within 10 percent of the original approved cost baseline (Critical Decision 2), unless otherwise impacted by a directed change. Baselines impacted by a directed change will have adjusted baselines established. On a program portfolio basis, 90 percent of DOE line item projects will meet the project success definition benchmark.	75% ⁸	80%	85%	90%	—
EM Cleanup (Soil and Groundwater Remediation, D&D, and Waste Treatment and Disposal) Projects: EM cleanup projects will be completed by achieving at least 80 percent of the defined near-term baseline end-state scope (Critical Decision 2) with less than a 25 percent cost variance from the original approved baseline, unless impacted by a directed change. On a program portfolio basis, 90 percent of EM cleanup projects will meet the project success definition benchmark. ⁹	Establish Baseline	Establish baseline	70% ¹⁰	80%	90%

ORGANIZATIONAL PERFORMANCE METRICS AND TARGETS

The metrics included in Table 3-2 are EM’s secondary metrics to measure progress towards achieving improved contract and project management. These end-state goals are consistent with the overall DOE contract and project management performance metrics and may change as more information becomes available. This will not detract from their intended purpose—namely, to monitor progress of continuous performance improvement. The lack of achievement of these

⁸ The performance targets are based on a 3-year rolling average of projects reaching CD-4. The FY 2008 target is based on projects reaching CD-4 in the 2006–2008 timeframe. Subsequent FY targets include projects reaching CD-4 in the respective subsequent 3 years.

⁹ The EM Cleanup Project performance metric will be reviewed within 2 years and revised to be more consistent with the Capital Asset Line Item Project performance metric, if appropriate.

¹⁰ The 3-year rolling average will be established in FY 2010 (the first 3-year’s worth of data will be available) in concert with revising the EM Cleanup Project performance metric.

goals should not and will not detract from the ultimate benchmark of project success. They will serve as management indicators and help focus management's attention and resources, as appropriate.

Table 3-2. Corrective Measure Performance Metrics and Targets						
Contract/Project Management Performance Metrics	FY 2008	FY 2009 Target	FY 2010 Target	FY 2011 Target	FY 2012 Target	FY 2013 Target
Plans, Policies, and Procedures						
By the end of FY 2011, 80% of projects (greater than \$100 million) will use PDRI methodologies no later than CD-2. ¹¹	Establish Baseline	50%	65%	80%	—	—
By the end of FY 2011, all projects (greater than \$750 million [i.e., Major System Projects]) applying new technology, as appropriate, will implement technology readiness assessment methodologies no later than CD-2.	Establish Baseline	50%	70%	80%	—	—
By the end of FY 2011, for all capital asset line item projects that are completed at CD-4, 50% are completed below their currently approved TPC with some contingency and/or management reserve remaining.	Establish Baseline	25%	40%	50%	—	—
By the end of FY 2013, 80% of capital asset line item projects (less than \$50 million) are fully funded in one Fiscal Year (one Appropriation). ¹²	N/A	N/A	N/A	80% of Projects <\$20M	80% of Projects <\$35M	80% of Projects <\$50M
By the end of FY 2011, 80% of contract awards are within plus or minus 25% of independent government cost estimates.	Establish Baseline	70%	75%	80%	—	—
By the end of FY 2011, on a program portfolio basis, 90% of all projects will meet the project schedule metric that follows: from CD-3 to CD-4, for projects less than five years in duration, they will be completed within 12 months of the original CD-3/4 duration. ¹³	75%	80%	85%	90%	—	—
By the end of FY 2011, on a program portfolio basis, 90% of all projects will meet the project schedule metric that follows: from CD-3 to CD-4, for projects greater than five years in duration, they will be completed within 20% of the original CD-3/4 duration. ¹¹	75%	80%	85%	90%	—	—

¹¹ Staffing contract and project management positions requires personnel with the required training and certification. The 80% staffing goal takes into consideration competing private sector employment opportunities and the remote geography of several DOE locations.

¹² This is a proposed metric based on a new established policy, if instituted.

¹³ The project schedule metric will be revisited within two years and revised, as appropriate. In the case of CD-3, actions that have been tailored (i.e., CD-3A, CD-3B, etc.) the duration clock starts at the first increment (i.e., CD-3A).

Table 3-2. Corrective Measure Performance Metrics and Targets						
Contract/Project Management Performance Metrics	FY 2008	FY 2009 Target	FY 2010 Target	FY 2011 Target	FY 2012 Target	FY 2013 Target
For projects post CD-3, by the end of FY 2011 and FY 2012, 95% of cost reimbursable capital asset line item projects (greater than \$20 million) and cost reimbursable EM cleanup projects, respectively, use certified earned value management systems.	65% Line Item	85% Line Item	90% Line Item	95% Line Item	95% EM Cleanup	—
	55% EM Cleanup	65% EM Cleanup	75% EM Cleanup	85% EM Cleanup		
By the end of FY 2011, 95% of all contract change orders are completed within 180 days or less.	Establish Baseline	75%	85%	95%		
By the end of FY 2011, 80% of pre-award milestones will be met on or ahead of schedule.	Establish Baseline	70%	75%	80%		
Continue to support the DOE small business program by obligating 4.8% of total contract obligations (procurement base) on small business contracts.	4.8%	4.8%	4.8%	4.8%	4.8%	4.8%
Human Capital						
By the end of FY 2010, 100% of the 159 FTE field gap (as identified by the USACE Best in Class Study) is addressed and staffed with qualified personnel.	Establish Gap	60%	80%	100%		
By the end of FY 2011, federal contract and project management positions (based on new model) are staffed at 80% of the desired level.	Start New Staffing Model	50%	65%	80%	—	—
By the end of FY 2011, 95% of projects have certified FPDs no later than CD-1.	85%	90%	93%	95%	—	—
By the end of FY 2011, 90% of projects have FPDs certified at the appropriate level assigned to projects no later than CD-3.	80%	85%	88%	90%	—	—
By the end of FY 2011, 85% of the 1102 contracting series will be certified.	78% ¹⁴	80%	83%	85% ¹⁵	—	—
By the end of FY 2011, achieve a contract specialist to contract value ratio of 1 per \$X* million or less. * The staffing study will establish the appropriate benchmark factor "X" to be applied	start staffing study	1 per \$2.0XM or less	1 per \$1.5XM or less	1 per \$XM or less	—	—

¹⁴ During FY 2008, DOE transitioned from the DOE Acquisition Career Development Program to the Government-wide Federal Acquisition Certification—Contracting (FAC-C). The transition to the new FAC-C is reflected in the FY 2008 target.

¹⁵ The percentage of certified 1102 series employees fluctuates significantly with changes in personnel due to the normal and expected cycles in attrition and hiring. It is also dependent on the actual level of funding made available for training. In FY 2011, the target will be reevaluated for possible increase in FY 2012 and beyond. We understand that 85% is the recognized target for DoD acquisition workforce certification and believe that it is an appropriate target for the DOE acquisition program. DOE's Acquisition Career Management Program was modeled after the DoD/DAWIA program.

Table 3-2. Corrective Measure Performance Metrics and Targets

Contract/Project Management Performance Metrics	FY 2008	FY 2009 Target	FY 2010 Target	FY 2011 Target	FY 2012 Target	FY 2013 Target
By the end of FY 2012, achieve a Federal Project Director (including Deputy FPD(s), as applicable) to annual work in place ratio of 1 per \$X* million or less, and/or in accordance with the staffing study.* The staffing study will establish the appropriate benchmark factor "X" to be applied	start staffing study	1 per \$2.5XM or less	1 per \$2.0XM or less	1 per \$1.5XM or less	1 per \$XM or less	—

4.0 Summary

Improving acquisition and project management, essential for EM to continue meeting its strategic objectives, remains a top priority of EM leadership. EM has implemented significant acquisition and project management enhancements and reforms that have already resulted in improved project execution and performance.

The EM Corrective Action Plan summarizes several of the accomplishments to date as well as the ongoing performance improvement initiatives. While EM is proud of its recent accomplishments, numerous additional improvement opportunities exist. Sustained leadership a strong and dedicated focus, and continued progress are major factors that will enhance EM's acquisition and project management performance.

The EM CAP identifies key performance improvement initiatives to make meaningful and measurable changes in acquisition and project management and to ultimately deliver projects within cost and schedule performance parameters. The focus of the CAP is to implement measures that successfully address internally- and externally-identified areas that require further improvement. These include:

- strengthening organizational alignment and leadership;
- enhancing management plans, policies, and processes;
- increasing the number and improving the capabilities of personnel; and
- improving knowledge and information management systems.

Lastly, the CAP establishes a series of performance metrics upon which EM acquisition and project management performance will be measured and reported.

Real, sustainable, and measurable acquisition and project management performance improvement requires EM organizational and leadership commitment to continuous performance improvement. The entire EM organization shares the responsibility for the success of the CAP. The development and implementation of current and planned initiatives is an EM-wide effort that requires broad support.

Implementation of this CAP is a significant step toward fundamentally reshaping the acquisition and project management culture within EM. Investments in organization leadership and alignment; human capital; plans, policies, and processes; and knowledge and information management will further strengthen acquisition and project management. Collectively, these investments will increase the discipline in EM acquisition and project management and result in significant improvements in execution and delivery. These improvements will be monitored and measured in accordance with the established performance metrics.

Appendix A. Specific Acquisition and Project Management Improvements

EM's ongoing acquisition and project management activities continue to be refined and enhanced while new initiatives are being developed, implemented, and completed. EM has adopted the GAO framework for improving its acquisition and project management functions. The framework consists of four interrelated areas that are essential to efficient, effective, and accountable EM acquisition and project management: (1) organizational alignment and leadership; (2) plans, policies, and processes; (3) human capital; and (4) knowledge and information management.

- ❖ **Organizational Alignment and Leadership**—Organizational alignment and leadership is the appropriate placement of the acquisition and project management functions within EM with stakeholders having clearly defined roles and responsibilities. Committed leadership enables EM to make strategic decisions that achieve acquisition and project management outcomes more effectively and efficiently.
- ❖ **Plans, Policies, and Processes**—Implementing strategic decisions to achieve desired EM outcomes requires clear and transparent plans, policies, and processes that are implemented consistently. Plans establish what is to be accomplished including at what cost and on what schedule. Policies establish expectations about the management of the acquisition and project management functions. Processes are the means by which management functions will be performed and implemented in support of EM missions. Effective plans, policies, and processes govern the planning, award, administration, and oversight of acquisition and project management efforts with a focus on assuring that these efforts achieve intended results.
- ❖ **Human Capital and Professional Development**—The value of EM's organization and its ability to satisfy stakeholders depends heavily on its people. Successfully acquiring goods and services and executing and monitoring contracts and projects to help EM meet its missions requires valuing and investing in the acquisition and project management workforce. EM must think strategically about attracting, developing, and retaining talent and creating a results-oriented culture within the acquisition and project management workforce.
- ❖ **Knowledge and Information Management**—Effective knowledge and information management provides credible, reliable, and timely data to make acquisition and project management decisions. Each stakeholder in the acquisition and project management processes—program and acquisition personnel who decide which goods and services to buy, project managers who receive the goods and services from contractors, contract administrators who oversee compliance with contracts, and finance personnel who pay

for the goods and services—need meaningful data to perform their respective roles and responsibilities.

A summary of each area, including specific elements and critical success factors, is included in Table A-1.

**Table A-1
Framework for Improving EM Acquisition and Project Management Functions¹⁶**

Areas	Elements	Critical Success Factors
Organizational Alignment and Leadership	Aligning Acquisition and Project Management with EM's Missions and Needs	<ul style="list-style-type: none"> ▪ Assuring Appropriate Placement of the Acquisition and Project Management Functions ▪ Organizing the Acquisition and Project Management Functions to Operate Strategically ▪ Clearly Defining and Integrating Roles & Responsibilities
	Commitment from Leadership	<ul style="list-style-type: none"> ▪ Clear, Strong, and Ethical Executive Leadership ▪ Effective Communications and Continuous Improvement
Plans, Policies and Processes	Planning Strategically	<ul style="list-style-type: none"> ▪ Partnering with Internal Organizations ▪ Assessing Internal Requirements and the Impacts of External Events
	Effectively Managing the Acquisition and Project Management Processes	<ul style="list-style-type: none"> ▪ Empowering Cross-Functional Teams ▪ Managing and Engaging Suppliers ▪ Monitoring and Providing Oversight of Desired Outcomes ▪ Enabling Financial Accountability
	Promoting Successful Outcomes of Major Projects	<ul style="list-style-type: none"> ▪ Using Sound Capital Investment Strategies ▪ Employing Knowledge-Based Acquisition and Project Management Approaches
Human Capital and Professional Development	Valuing and Investing in the Acquisition and Project Management Workforce	<ul style="list-style-type: none"> ▪ Commitment to Human Capital Management ▪ Role of the Human Capital Function
	Strategic Human Capital Planning	<ul style="list-style-type: none"> ▪ Integration and Alignment ▪ Data-Driven Human Capital Decisions
	Acquiring, Developing and Retaining Talent	<ul style="list-style-type: none"> ▪ Targeted Investments in People ▪ Human Capital Approaches Tailored to Meet Organizational Needs
	Creating Results-Oriented Organizational Cultures	<ul style="list-style-type: none"> ▪ Empowerment and Inclusiveness ▪ Individual Performance Linked to Organizational Goals
Knowledge and Information Management	Identifying Data and Technology that Support Acquisition and Project Management Decisions	<ul style="list-style-type: none"> ▪ Tracking Acquisition and Project Management Data ▪ Translating Financial Data into Meaningful Formats ▪ Analyzing Goods and Services Spending
	Safeguarding the Integrity of Operations and Data	<ul style="list-style-type: none"> ▪ Ensuring Effective General and Application Controls ▪ Data Stewardship

¹⁶ Adopted from the U.S. Government Accountability Office; "Framework for Assessing the Acquisition Function at Federal Agencies", September 2005.

The following section summarizes the specific EM acquisition and project management improvements that have been completed or are ongoing in each of the four areas. The documents supporting implementation of the NAPA Recommendations, Best-in-Class Recommended Actions, and EM Improvement Initiatives are being placed on the EM portal and will be consolidated by 9/30/09. DOE Corrective Measure improvements will be completed in accordance with the dates in the DOE CAP.

A.1 ORGANIZATIONAL ALIGNMENT AND LEADERSHIP

The focus of organizational alignment and leadership improvement activities is to ensure the appropriate placement of the acquisition and project management functions within EM, including clearly defining roles and responsibilities. The following summarizes EM's acquisition and project management organizational alignment and leadership initiatives.

A.1.1 Organizational Structure

Source	Performance Improvement Description	Status ¹⁷
EM Improvement Initiative	A.1.1.1 Establish new position and office: Deputy Assistant Secretary for Acquisition and Project Management (EM-50)	Complete
NAPA Recommendation	A.1.1.2 Revise plans for the acquisition machine to locate the contract placement function at the EM CBC.	Complete
NAPA Recommendation	A.1.1.3 Develop a plan for centralizing the award and administration of all EM financial assistance instruments at the EM CBC.	Complete
NAPA Recommendation	A.1.1.4 Develop an internal cost-estimating capacity in EM headquarters as well as at EM's field sites.	Complete

A.1.2 Roles, Responsibilities, and Accountability

Source	Performance Improvement Description	Status
EM Improvement Initiative	A.1.2.1 Develop a pre-award IPT template of roles and responsibilities including assigning experienced Acquisition Planning Managers (APMs) to help lead field IPTs and SEBs through pre-award acquisition processes.	Complete
NAPA Recommendation	A.1.2.2 Develop guidance for EM staff that clarifies the staff's role in dealing with the contractor.	Complete
NAPA Recommendation	A.1.2.3 Arrange for the EM CBC to provide cost and price analysis support to all EM sites.	Complete
NAPA Recommendation	A.1.2.4 Assign Leadership for BICPM Implementation. ¹⁸	Complete

¹⁷ For ongoing EM performance improvement initiatives, the planned completion date is identified. If no planned completion date is included, it represents a routine, ongoing activity. PA # refers to priority action number.

¹⁸The EM Best in Class Project Management and Contract Management initiative includes both contract and project management. This performance improvement item is also applicable to organizational alignment and leadership: contract management.

Source	Performance Improvement Description	Status
Best In Class Recommended Action	A.1.2.5 Clarify Roles and Responsibilities between Project Management and Contract Management Organizations. ¹⁹	Complete
EM-Improvement Initiative	A.1.2.6 Establish the position of the Competition Advocate and Ombudsman at the HCA for all EM acquisition activities.	Complete

A.2 PLANS, POLICIES AND PROCESSES

Improving plans, policies, and processes provides the necessary framework to govern the planning, award, administration, and oversight of contracts and projects with an emphasis on assuring that efforts achieve intended results. The following summarizes EM's acquisition and project management plans, policies, and processes initiatives.

A.2.1 Procurement Planning

A.2.1.1 Acquisition Strategy/Planning

Source	Performance Improvement Description	Status
EM Improvement Initiative	A.2.1.1.1 Develop guidance that would allow streamlining development of acquisition plans. Focus acquisition plan on procurement considerations while the acquisition strategy is focused on programmatic issues.	9/30/09
EM Improvement Initiative	A.2.1.1.2 Complete a 10-year acquisition schedule for the entire portfolio or category/categories of contracts.	Complete
EM Improvement Initiative	A.2.1.1.3 Ensure that proper contract types are being utilized.	Ongoing
NAPA Recommendation	A.2.1.1.4 Develop detailed guidance for determining the appropriate contract types for EM acquisitions.	Complete
DOE Root Cause Analysis Corrective Action Plan	A.2.1.1.5 Complete the RCA corrective actions to strengthen the commitment to federal ownership by aligning and integrating acquisition strategies, acquisition plans and project plans.	Ongoing
EM Improvement Initiative	A.2.1.1.6 Develop an EM Procurement Action Reporting System (EMPARS) to aid planning, accountability and oversight of major acquisition initiatives' acquisition cycle time.	Complete
EM Improvement Initiative	A.2.1.1.7 Analyze the end-to-end major acquisition process to establish pre-award process functional decomposition/work breakdown structure with nominal acquisition cycle time. ⁴	Complete
EM Improvement Initiative	A.2.1.1.8 Create visual tool that depicts who is working on a particular subset of acquisition process to support acquisition workforce training and facilitate business process re-engineering, i.e., process flow diagrams for major acquisition pre-award process with primary responsible organization/individual(s) depicted (process maps/"swim lanes"). ²⁰	Complete
EM Improvement Initiative	A.2.1.1.9 Develop standardized guidance and templates with quality review checklist for synopsisizing procurement actions and for preparing and processing Justifications for Other Than Full and Open Competition (JOFOCs).	9/30/09

¹⁹ Clarifying roles and responsibilities is also applicable to organizational alignment and leadership: project management.

²⁰ Process work breakdown structure and flow diagrams also applicable to Knowledge and Information Management : Accessible Knowledge and Information Repository.

A.2.1.2 Business Clearance Review

Source	Performance Improvement Description	Status
EM Improvement Initiative	A.2.1.2.1 Tighten control of acquisition documents and reduce the number of reviewers to those who have a substantial interest or can provide value to improve document quality.	Complete
EM Improvement Initiative	A.2.1.2.2 Use the Procurement Strategy Panel to involve stakeholders during the acquisition planning process and drive critical decision making and share ownership.	Complete
NAPA Recommendation	A.2.1.2.3 Conduct a business process reengineering analysis of the DOE business clearance review process.	Complete
NAPA Recommendation	A.2.1.2.4 Review all EM processes for reviewing and approving acquisition transactions at EM headquarters.	Complete
NAPA Recommendation	A.2.1.2.5 Draft a proposal to OPAM to pilot test the review thresholds contained in the Panel's second Observations Paper at a single EM site, such as the EM CBC.	Complete
EM Improvement Initiative	A.2.1.2.6 Institute a joint, independent review process for review of documents subject to the DOE business clearance review process for Head of Contracting Activity (HCA) and Senior Procurement Executive (SPE) approval.	Complete

A.2.1.3 Solicitation Preparation/Source Evaluation and Selection/Contract Award

Source	Performance Improvement Description	Status
NAPA Recommendation	A.2.1.3.1 Develop and execute an implementation plan for the DAS for Acquisition and Project Management to assume EM Head of Contracting Activity (HCA) responsibilities.	Complete
NAPA Recommendation	A.2.1.3.2 Develop and implement a Performance-Based Acquisition (PBA) training initiative.	Complete
EM Improvement Initiative & NAPA Recommendation	A.2.1.3.3 Develop standardized guidance and templates for key evaluation criteria areas, including experience, past performance, key personnel, organization, risk management, and technical approach.	9/30/09
EM Improvement Initiative	A.2.1.3.4 Develop standardized guidance and templates for defining data deliverables and review and approval processes for contract award documents and CMPs. ²¹	9/30/09
EM Improvement Initiative	A.2.1.3.5 Develop standardized guidance and templates with quality review checklists as applicable for key source evaluation process steps, including Source Selection Plan, Cost Evaluation, SEB Reports, award without discussions, preparation for and conduct of discussions, SSO briefing and decision documentation.	9/30/09
EM Improvement Initiative	A.2.1.3.6 Establish a virtual acquisition center to support SEB activities. Establishment of the facilities will reduce travel costs and facilitate the development of procurement documents and reviews of proposals.	Complete

²¹ Contract Data Deliverables Definition is also applicable to Policies and Processes: Contract Execution/Contract Management, Surveillance and Monitoring.

A.2.2 Contract Execution

A.2.2.1 Change Order Management (including Contract Modifications and Requests for Equitable Adjustments)

Source	Performance Improvement Description	Status
Best In Class Recommended Action	A.2.2.1.1 Address Unresolved Baseline Change Proposals and Request for Equitable Adjustments. ²²	Complete
Best In Class Recommended Action	A.2.2.1.2 Establish a Standardized and Integrated Change Control Process. ²³	Complete
EM Improvement Initiative	A.2.2.1.3 Develop standardized guidance and template with quality review checklists for reviewing and obtaining approval for the ratification of unauthorized commitments.	9/30/09

A.2.2.2 Small Business Program

Source	Performance Improvement Description	Status
NAPA Recommendation	A.2.2.2.1 Develop appropriate planning templates that provide for full consideration of the issues and concerns related to small business set-asides.	Complete
EM Improvement Initiative	A.2.2.2.2 Provide current small business subcontract reporting training to EM contracting staff.	Complete

A.2.2.3 Contract Management, Surveillance and Monitoring

Source	Performance Improvement Description	Status
NAPA Recommendation	A.2.2.3.1 Develop a detailed proposal for improving the current acquisition oversight program.	Complete
EM Improvement Initiative	A.2.2.3.2 Develop comprehensive, standardized guidance, process flow diagrams and quality assurance checklist for the process of transition to a successor contractor.	9/30/09
EM Improvement Initiative	A.2.2.3.3 Develop standardized guidance, templates, process flow diagrams and quality review checklists for the recurring contract management requirements of subcontract consent and contractor executive compensation approval.	9/30/09
EM Improvement Initiative	A.2.2.3.4 Conduct Acquisition Management Reviews (AMRs) at EM sites.	Complete
EM Improvement Initiative	A.2.2.3.5 Follow-through with EM sites to resolve findings of AMRs in FY 2009.	Ongoing
EM Improvement Initiative	A.2.2.3.6 Participate in OPAM Procurement Management Reviews across DOE sites.	Complete
EM Improvement Initiative	A.2.2.3.7 Conduct monthly contract change status review of EM contracts where modifications are expected to take longer than 180	Complete

²² Baseline change proposals and requests for equitable adjustments are also applicable to Policies and Processes: Project Management.

²³ Standardized and integrated change control process is also applicable to Policies and Processes: Contract Management.

Source	Performance/Improvement Description	Status
	days.	
EM Improvement Initiative	A.2.2.3.8 Conduct quarterly contract reviews of EM sites' contract and acquisition workforce management functions (contractor systems review, audits, business clearance planning, small business subcontracting, and CO/COR certification levels).	Ongoing
EM Improvement Initiative	A.2.2.3.9 Conduct DAS review and integration of contractor performance metrics/performance incentives with program lessons learned and mission requirements.	Ongoing
EM Improvement Initiative	A.2.2.3.10 Conduct site incentive fee briefing to EM HQ DASs on new contract awards to integrate program and site transition activities.	Complete
EM Improvement Initiative	A.2.2.3.11 Conduct a pension/post retirement benefits contractual oversight workshop to educate EM COs and IR staff on new contract administration requirements.	Complete

A.2.3 Project Management

A.2.3.1 Baseline Development/Management (including Project Development Rating Index, Risk Management)

Source	Performance/Improvement Description	Status
EM Improvement Initiative	A.2.3.1.1 Assess effectiveness of value engineering management on all Line Item Construction Projects and implement corrective actions for any value engineering changes, as identified.	9/30/09
EM Improvement Initiative	A.2.3.1.2 Utilize guidance from Internal Project Review SOPP to strengthen baselines/contracts with measurable quantitative criteria.	9/30/09
EM Improvement Initiative	A.2.3.1.3 Implement PMIS on all line item projects from an EVMS standpoint.	9/30/09
EM Improvement Initiative	A.2.3.1.4 Evaluate Risk Management Plans and what percentage of low, medium, and high probability risk events actually materialize; compare actual impacts to estimated impacts; and identify risks that materialized but were not anticipated during risk planning activities.	Ongoing
NAPA Recommendation	A.2.3.1.5 Standardize and integrate project performance management tools across the complex, particularly those that supplement or are integrated with the Earned Value Management System.	Complete
Best In Class Recommended Action	A.2.3.1.6 Complete Federal Risk Management Plans and use on an ongoing basis.	9/30/09
Best In Class Recommended Action	A.2.3.1.7 Maintain Validated Federal Five-Year Baselines and Out-Year Planning Estimate Ranges and maintain on an ongoing basis.	Ongoing
Best In Class Recommended Action	A.2.3.1.8 Develop EM Program Level Risk, including Risk Register and Contingency.	9/30/09
GAO Recommendation	A.2.3.1.9 Include in budget requests to Congress the life cycle baseline cost estimate information for each cleanup project, including prior year costs, estimated near-term costs, and estimated out-year costs.	2/15/10
GAO Recommendation	A.2.3.1.10 Develop an approach to regularly inform Congress of progress and significant changes in order to improve EM's accountability for managing the near-term baseline and tracking life cycle costs.	9/30/09
GAO Recommendation	A.2.3.1.11 Expand the content of EM performance reports to describe the implications of current performance for the project's overall life cycle baseline.	Complete

Source	Performance Improvement Description	Status
DOE Root Cause Analysis Corrective Action Plan	A.2.3.1.12 Establish and implement measures to ensure adequate project requirements definition is accomplished before a project performance baseline is established.	Ongoing
DOE Root Cause Analysis Corrective Action Plan	A.2.3.1.13 Establish objective, uniform methods for assessing, communicating, and managing project risks and uncertainties.	12/30/09
DOE Root Cause Analysis Corrective Action Plan	A.2.3.1.14 Improve the alignment and integration of cost baselines with budget funding profiles to account for federal budget fiscal realities and to ensure uninterrupted project execution.	9/30/09
DOE Root Cause Analysis Corrective Action Plan	A.2.3.1.15 Identify and implement opportunities to improve the management and oversight of projects.	Ongoing

A.2.3.2 Project Oversight (including Project Reviews)

Source	Performance Improvement Description	Status
EM Improvement Initiative	A.2.3.2.1 Coordinate and actively participate in reviews of project management, cost, schedule and scope for all line item projects.	Ongoing
EM Improvement Initiative	A.2.3.2.2 Conduct EM Construction Project Reviews (CPRs) every six months for the following projects: WTP, SWPF, IWTU, U233, DUF6, Plutonium Preparation, K-Basin, Tank Farm, and Tank 48.	Ongoing
EM Improvement Initiative	A.2.3.2.3 Participate in field office regularly scheduled monthly contractor performance reviews, including post-review discussions with the Federal Project Directors relating to project performance and issues requiring attention.	Ongoing
NAPA Recommendation	A.2.3.2.4 Build upon EM's current assessment of QA at construction sites, and perform a general assessment of QA.	Complete
Best In Class Recommended Action	A.2.3.2.5 Streamline Critical Decision Document Review and Concurrence.	Complete

A.2.3.3 Project Support/Policy

Source	Performance Improvement Description	Status
EM Improvement Initiative	A.2.3.3.1 Issue the contingency implementation guide. (Draft)	Complete
NAPA Recommendation	A.2.3.3.2 Modify Integrated Planning Accountability and Budgeting System (IPABS) to enable it to compare Earned Value Management System (EVMS) cost and performance information with budget data.	Complete
NAPA Recommendation	A.2.3.3.3 Examine EM's procedures for responding to, and holding field personnel accountable for, the color assessments of projects.	Complete
NAPA Recommendation	A.2.3.3.4 Work with each field office to produce project-specific success metrics.	Complete
NAPA Recommendation	A.2.3.3.5 Produce a formal requirements document that defines the functional requirements for replacing or modifying IPABS.	Complete
NAPA Recommendation	A.2.3.3.6 Determine whether, historically, the funds identified as "unfunded contingency" have been balanced between overruns and surpluses, as well as whether the practice has prompted an excessive need for project time extensions or reprogramming requests to Congress.	Complete
NAPA Recommendation	A.2.3.3.7 Develop written guidance that clearly describes the roles, responsibilities, and processes for executing baseline changes.	Complete

Source	Performance Improvement Description	Status
Best In Class Recommended Action	A.2.3.3.8 Develop and Improve Federal Work Plans at Each Site.	Complete
Best In Class Recommended Action	A.2.3.3.9 Complete DOE EM Project Management Guidance.	9/30/09
GAO Recommendation	A.2.3.3.10 Consolidate, clarify and update guidance for managing cleanup projects.	Ongoing
DOE Root Cause Analysis Corrective Action Plan	A.2.3.3.11 Identify and implement opportunities to improve the management and oversight of projects.	Ongoing
DOE Root Cause Analysis Corrective Action Plan	A.2.3.3.12 Re-evaluate program and project management policy, guidance, and standards for alignment and consistency and ensure that all project management requirements are clearly documented and followed and responsible personnel are held accountable.	Ongoing

A.2.3.4 Technology Readiness Assessments

Source	Performance Improvement Description	Status
NAPA Recommendation	A.2.3.4.1 Implement Technology Maturity Levels (TML), and institute a formalized process for assigning ratings to proposed technological solutions.	Complete

A.2.3.5 Safety Management and Quality Assurance

Source	Performance Improvement Description	Status
EM Improvement Initiative	A.2.3.5.1 Develop Standard Review Plan (SRP) Modules based on high priority DOE Order 413.3 and EM Program requirements.	9/30/09
EM Improvement Initiative	A.2.3.5.2 Implement Vendor Shop Initiative (VSI) Phase I for EM construction projects, focused on 27 ongoing and near future critical SS/SC procurements. Deploy independent Quality Control Inspections at vendor fabrication facilities.	9/30/09
EM Improvement Initiative	A.2.3.5.3 Conduct 15 quality assurance audits, assessments, surveillances, and reviews of EM field sites, projects, activities, and processes. Issue reports with findings and observations. Track site corrective actions using newly developed web-based EM HQ Corrective Action Status Tracking Database.	9/30/09
EM Improvement Initiative	A.2.3.5.4 Issue interim guidance on incorporation of safety into design prior to DOE issuance of DOE-STD-1189. Subsequent to issuing DOE-STD-1189, issue policy for implementation of DOE-STD-1189 to transition from interim guidance and to clarify expectations for DOE-STD-1189 methodologies.	Complete
EM Improvement Initiative	A.2.3.5.5 Develop and implement an organizational operating experience program with a lessons learned component.	Complete
EM Improvement Initiative	A.2.3.5.6 Establish and implement a Technical Authority Board process to provide focus on resolution of technical issues, separate from programmatic and cost drivers.	Complete
DNFSB Recommendation 2004-1	A.2.3.5.7 Develop process for performance of Integrated Safety Management System (ISMS)/Quality Assurance reviews and declarations at all EM sites.	Complete

A.2.3.6 Cost Estimating

Source	Performance Improvement Description	Status
DOE Root Cause Analysis Corrective Action Plan	A.2.3.6.1 Establish and implement a federal independent government cost estimating capability, including the development of appropriate policy and standards, allocation or required resources, and compilation of unit cost labor and material databases.	Ongoing

A.3 HUMAN CAPITAL AND PROFESSIONAL DEVELOPMENT

Attracting, developing, and retaining talent is essential to successfully acquiring goods and services and executing and monitoring contracts and projects to help EM meet its missions. The following summarizes EM's acquisition and project management human capital and professional development initiatives.

A.3.1 Federal Staffing

Source	Performance Improvement Description	Status
EM Improvement Initiative	A.3.1.1 Designate resources for the procurement IPT and SEB phase. Formalize these designations to prioritize responsibilities for all stakeholders.	9/30/09
NAPA Recommendation	A.3.1.2 Develop a staffing request for necessary GS 1102 procurement analysts and submit it to DOE headquarters for approval.	Complete
Best In Class Recommended Action	A.3.1.3 Provide Project Management and Contract Management Capability Reinforcements. ²⁴	Complete
Best In Class Recommended Action	A.3.1.4 Provide Additional Project Management Resources.	Complete
Best In Class Recommended Action	A.3.1.5 Update and Implement Human Capital Plans. ²⁵	Complete
DOE Root Cause Analysis Corrective Action Plan	A.3.1.6 Develop and implement a comprehensive federal staffing plan, with an associated resource plan, to recruit, develop, and retain the optimum contract and project management federal workforce. ²⁶	Ongoing
EM Improvement Initiative	A.3.1.7 Develop and implement an HCA directive specifying the process and requirements for requesting issuance of contracting officer warrants under EM HCA authority.	Complete
EM Improvement Initiative	A.3.1.8 Develop standardized guidance, templates and quality review checklists as well as updated HCA directive for requesting issuance of contracting officer warrants under EM HCA authority.	9/30/09

²⁴ Capability reinforcement is also applicable to Human Capital: Project Management.

²⁵ Human capital plan updates are also applicable to Human Capital: Contract Management

²⁶ Federal staffing is also applicable to Human Capital: Project Management.

A.3.2 Training and Development

Source	Performance Improvement Description	Status
EM Improvement Initiative	A.3.2.1 Provide training to the acquisition IPT and clarify members' roles and responsibilities.	Complete
NAPA Recommendation	A.3.2.2 Modify project management training to include an increased focus on the capabilities and limitations of its tracking and reporting systems—EVMS, IPABS, and PARS.	Complete
NAPA Recommendation	A.3.2.3 Undertake a study of the appropriateness of the DOE FPD certification standards to the unique operating and cleanup projects and use the results as a basis to tailor a version of those standards specifically for EM FPD's.	Complete
NAPA Recommendation	A.3.2.4 Pilot test a management case study workshop aimed specifically at the federal project directors (FPDs) and, if successful, include the workshop as mandatory training for some or all FPD certification levels.	Complete
EM Improvement Initiative	A.3.2.5 Begin development of standardized guidance, requirements, and processes for certifying Contracting Officer Representatives (CORs).	9/30/09
EM Improvement Initiative	A.3.2.6 Identify COR requirements for unique contract administration issues of Energy Savings Performance Contracts (ESPCs).	9/30/09
EM Improvement Initiative	A.3.2.7 Develop a proposal for an Acquisition Cadre for EM (ACE) program so trained and experienced personnel are available to serve in acquisition roles across EM.	Complete

A.4 KNOWLEDGE AND INFORMATION MANAGEMENT

Effective knowledge and information management provides credible, reliable, and timely data to make acquisition and project management decisions. The following summarizes knowledge and information management initiatives within EM acquisition and project management.

A.4.1 Lessons Learned

Source	Performance Improvement Description	Status
EM Improvement Initiative	A.4.1.1 Condense SEB reports. Develop precise guidelines about what should be included and omitted in SEB reports.	Complete
EM Improvement Initiative	A.4.1.2 Develop lessons learned recommendations as needed subsequent to major reviews and/or baseline revisions.	Ongoing
EM Improvement Initiative	A.4.1.3 Identify additional data fields in IPABS that are needed to more effectively assess the use of earned value performance measurements for contractors, projects (contractor and DOE), and approved baselines.	9/30/09
NAPA Recommendation	A.4.1.4 Prepare and issue a document that summarizes the basic factual circumstances related to the cost growth and schedule slippage on the Waste Treatment Plant project and identifies the lessons that could be applied to other EM acquisition situations.	Complete
NAPA Recommendation	A.4.1.5 Take full advantage of the lessons learned from the Moab and West Valley pilots of the Partnership for Public Service's Acquisition Innovation Project.	Complete
EM Improvement Initiative	A.4.1.6 Conduct retrospect analyses to promote learning after completion of major acquisition milestones.	Ongoing

A.4.2 Benchmarking

Source	Performance Improvement Description	Status
NAPA Recommendation	A.4.2.1 Examine the acquisition planning policies and practices of the Naval Facilities Engineering Command (NAVFAC).	Complete
NAPA Recommendation	A.4.2.2 Require contractors to produce EVMS' five standard Cost Performance Report (CPR) reporting formats.	Complete
Best In Class Recommended Action	A.4.2.3 Establish Standards for DOE EM Management Products and Practices.	Complete
Best In Class Recommended Action	A.4.2.4 Complete pilot selection and implementation of an Enterprise Project Management Software Solution.	9/30/09
Best In Class Recommended Action	A.4.2.5 Develop a Cost Pricing Database.	9/30/09

A.4.3 Accessible Knowledge and Information Repository

Source	Performance Improvement Description	Status
EM Improvement Initiative	A.4.3.1 Establish EM Portal Acquisition Section as a holistic web-based resource for acquisition knowledge including policies, procedures and templates for use across the EM complex and by external stakeholders.	9/30/09
EM Improvement Initiative	A.4.3.2 Provide subscription service to deliver daily news and research on acquisition subjects and other information to contracting officers' desktops.	Complete

Appendix B. GAO Comments on EM Contract and Project Management Corrective Action Plan

GAO Summary Comments	EM Response and CAP Revisions
<p>We would like to thank DOE-EM officials for giving us a chance to review and comment on EM's draft Corrective Action Plan. The plan is responsive to one of our recommendations made last year in GAO-08-1081. We were pleased to read (on page 15) and agree with the statement that the two overarching performance metrics—one for construction projects and one for EM cleanup projects—are the focus of EM efforts to improve performance and that lack of achievement of EM's secondary metrics should not and will not detract from efforts to attain these overarching metrics.</p>	<p>No specific comment.</p>
<p>We would like to reiterate our view on the EM-CAP (and DOE-CAP) overarching performance metric for EM cleanup projects. As we reported in GAO-08-1081, on pages 38 and 43, we do not agree with this new metric for cleanup projects. We explain our rationale in the report and continue to believe that this metric is not appropriate for improving project performance. We reported that projects are now considered successful if they achieve at least 80 percent of their planned work scope and accomplish this with no more than a 25 percent cost increase. We observed that this new performance metric permits up to 20 percent of the initial scope of work to be deferred from the near term baseline to the out year portion of the baseline, which creates a substantially greater risk that life cycle costs will continue to increase and that completion dates will be delayed. By lowering expectations for adhering to cost and schedule baselines, DOE inadvertently may be creating an environment in which large increases to project costs become not only more common, but accepted and tolerated.</p>	<p>Concur. In accordance with the DOE CAP commitment to revisit the performance metric for EM Cleanup, the EM Program is currently reviewing this metric. A proposed revised metric will be complete by 9/30/09. (See attached June 5, 2009 and June 24, 2009 Ines Triay memorandums.</p>
<p>The EM-CAP (and DOE-CAP) performance metric for cleanup projects appears to include performance information only for those cleanup projects that have been completed during the 3-year rolling average time period. As we discussed recently with EM staff, we believe that, in addition to completed cleanup projects, the performance metric for cleanup projects should also include performance information for those cleanup projects that have completed their near-term baseline during the 3-year rolling average time period. As discussed, a small number of the larger cleanup projects account for a large portion of EM's annual budget, these projects are the most complex and challenging, and they will not be completed for many years. Including performance information on these larger, longer-term projects as they complete their near-term baselines would better reflect EM's overall performance.</p>	<p>Concur. In accordance with the DOE CAP commitment to revisit the performance metric for EM Cleanup, the EM Program is currently reviewing this metric. A proposed revised metric will be complete by 9/30/09. (See attached June 5, 2009 and June 24, 2009 Ines Triay memorandums.</p>
<p>While we appreciate EM's attempts to formulate a corrective action plan, it is not entirely clear how much this plan differs from the DOE CAP. Without directly saying so, it appears that the EM-CAP includes (1) the DOE-CAP two overarching metrics in their entirety, (2) all but one of the DOE-CAP secondary metrics, (3) added four additional EM secondary metrics, and (4) five of the 139 initiatives in Appendix A are nearly identical to 5 of the 8 corrective measures included in the DOE-CAP. It would be helpful to explain this so the reader may understand better the similarities and differences between the EM-CAP and the DOE-CAP.</p>	<p>Concur. The relationship between the DOE CAP and EM CAP has been clarified (page iv)</p>

GAO Detailed Comments	EM Response and CAP Revisions
<p>Page 6 – The DOE CAP is mentioned, but the similarities and differences between the DOE-CAP and the EM-CAP are unclear. (See Summary comment above.)</p>	<p>Concur. The relationship between the DOE CAP and EM CAP has been clarified (page iv)</p>
<p>Page 14 – EM's Performance Metrics refer to a directed change, but do not define the term. We recommend revising the EM-CAP to incorporate the DOE-CAP definition of a "directed change" as found on page x, footnote 1 of the DOE-CAP. This definition is more precise and appropriate than the definition used in DOE Order 413.3A.</p>	<p>Concur. The definition of directed change (as defined and included in the DOE CAP) has been incorporated in the EM CAP (page 6).</p>
<p>Page 14 - It is unclear in the EM-CAP (and the DOE-CAP) which EM cleanup projects will be included in the overarching primary metric for EM cleanup projects shown in Table 3-1 of the EM-CAP. (See Summary comments above.) We have several questions related to this performance metric:</p> <ul style="list-style-type: none"> (a) Will this metric include performance information only for those EM cleanup projects that have reached CD-4 within the 3-year rolling average? (b) Will it also include performance information for EM cleanup projects that have completed their near-term baseline within the 3-year rolling average? (c) If it includes performance information on EM cleanup projects as they complete their near-term baselines, by what measures will EM determine that a cleanup project has met its near-term baseline scope? (d) Would EM provide us examples of how a cleanup project has established a near-term scope when a near-term baseline is established and how it was determined that a cleanup project was completed at least 80 percent of its initial scope of work? 	<p>Concur. In accordance with the DOE CAP commitment to revisit the performance metric for EM Cleanup, the EM Program is currently reviewing this metric. A proposed revised metric will be complete by 9/30/09. (See attached June 5, 2009 and June 24, 2009 Ines Triay memorandums.</p>
<p>Page 14 - Given the large variation between the size of the cleanup projects it may be more appropriate to measure the performance of EM cleanup projects based on dollar value of the projects rather than counting projects.</p>	<p>Currently under consideration. The EM Cleanup metric is currently under review and a proposed revision will be complete by 9/30/09.</p>
<p>Pages A-3 – A-13 – References are made to multiple documents as the sources for the 139 initiatives shown on these pages. The EM-CAP could be improved by providing footnote citations to the reports cited on these pages. Have all the recommendations made in each of these reports been carried over to the list of initiatives?</p>	<p>Concur. References to the documents have been included (page iv). Yes, all recommendations from the referenced reports have been included in the EM CAP either separately or combined with other ongoing, related performance improvement initiatives.</p>
<p>Pages A-3 – A-13 – It is unspecified how the status of the initiatives shown on these pages is determined—who is responsible for determining the status? Is there a record kept of the actions taken for each of these initiatives? There is no indication of when any of these initiatives shown as "ongoing" may be completed.</p>	<p>Concur. The documents supporting the implementation of initiatives are being placed on the EM portal and will be consolidated by 9/30/09.</p>