(Pre-Decisional)

DRAFT (10/12/2010)

Roadmap

EM Journey to Excellence

U.S. Department of Energy
Office of Environmental Management

[Inside Front Cover]

DOE Management Principles

1. Our mission is vital and urgent.
2. Science and technology lie at the heart of our mission.
3. We will treat our people as our greatest asset.
4. We will pursue our mission in a manner that is safe, secure, legally and ethically sound, and fiscally responsible.
5. We will manage risk in fulfilling our mission.
6. We will apply validated standards and rigorous peer review.
7. We will succeed only through teamwork and continuous improvement.

EM Core Values

1. We care about our mission, have a sense of urgency in the pursuit of our goals and a desire for quality in our work.
2. We demonstrate accountability by taking ownership, meeting our commitments, and admitting our mistakes.
3. We acknowledge and reward individual and team successes.
4. We talk directly and honestly to each other to resolve conflict in a timely and respectful manner.
5. We communicate clearly and concisely and check for understanding.
6. We ask for help when we need it and we look for ways to help each other succeed.
7. We have a questioning attitude and pursue issues until a decision is made.

Letter from the Assistant Secretary

We have recently commemorated the 20th anniversary of the Environmental Management Program. For 20 years, we have attracted, trained, and retained a premiere nuclear workforce. For 20 years, we have expertly and safely managed nuclear waste and overcome challenges associated with the world's largest nuclear cleanup. For 20 years, we have protected the health and safety of communities around the country who are home to the environmental legacy left behind from decades of nuclear weapons production and government-sponsored nuclear energy research, which was vital to our Nation's security.

We have made tremendous progress and have celebrated our success in the face of many management challenges throughout the program's development. We will continue this momentum and build on it. With this solid footing, we now embark on a Journey to Excellence; that is, becoming an organization that is learning lessons and improving; benchmarking ourselves against the best peer organizations; and building a culture of professionalism, that develops leaders and innovators, and that enables mission completion.

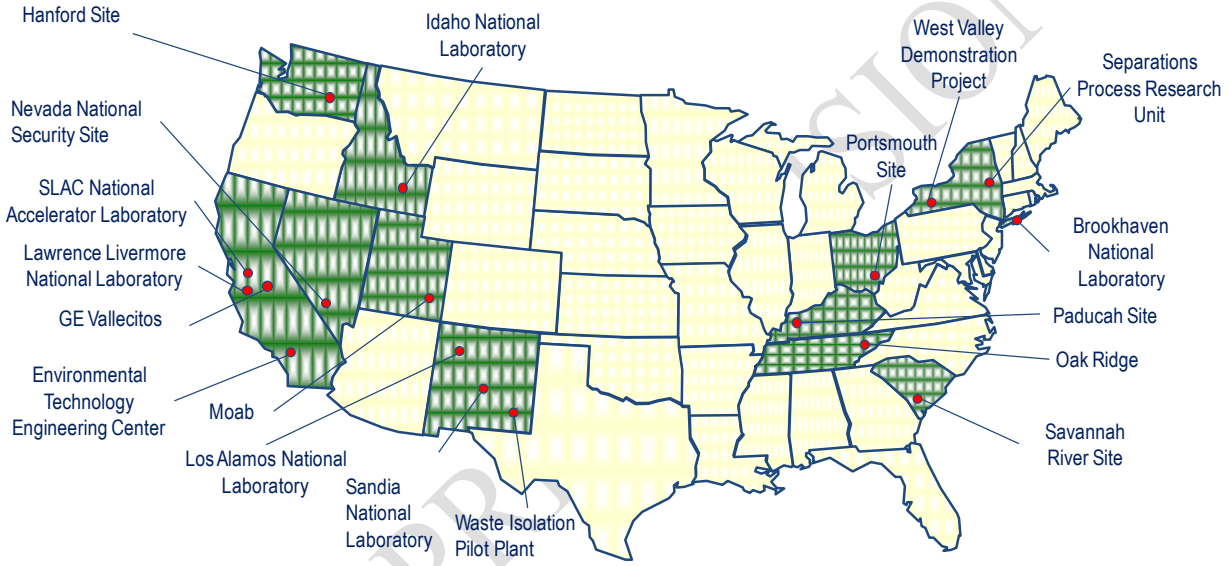
I am pleased to present this Roadmap for EM's Journey to Excellence. It will serve as our guide by clearly defining our destination, the path we will take to reach our destination, the principles by which we will behave, and how we will measure our progress on the way. I am particularly pleased to present this to you because it is the culmination of input from Headquarters and Field employees. All of you have had the opportunity to help shape our Journey's goals, strategies, and success indicators. I want to thank each and every one of you who participated in this process. We have a clearer vision and more meaningful Roadmap due to your thoughts, ideas, questions, and comments.

Our organization has first-rate employees; leading-edge equipment and facilities; and disciplined safety, acquisition, and project management processes. We will continue to focus on risk reduction and cleanup that is safe, environmentally responsible, cost effective, efficient, and prioritized based on sound principles. We will continue to engage the public, Tribal Nations, regulatory agencies, State and local governments, and other stakeholders in developing cleanup strategies and making sustainable decisions. We will keep to our core values for our customer, the American people, who are at the forefront of our minds in everything we do.

While I believe achieving excellence is a continuous journey rather than a final destination, I also think it is important to acknowledge the tremendous work we have already accomplished. EM has successfully completed the cleanup of several sites, turning liabilities into assets. EM constructed and is operating the first permanent geological repository for radioactive waste in the world. Your past successes are numerous. Your future accomplishments are certain. Thank you for taking this Journey to Excellence with me.

Inés Triay
Assistant Secretary
Office of Environmental Management

DRAFT PRE-DECISIONAL



Funded Environmental Management Program Sites throughout the United States as of the end of the 2010 Fiscal Year

DRAFT PRE-DECISIONAL

Table of Contents

Page

Our Location – Where We Are 1

Where We Are Going – Destination 5

How Do We Get There – Our Goals 5

What We Do – Program Goals 7

Goal 1. Complete the three major tank waste treatment constuction projects within the approved baselines. 7

Goal 2. Reduce the life-cycle costs and accelerate the cleanup of the Cold War environmental legacy 8

Goal 3. Complete disposition of 90 percent of the legacy transuranic (TRU) waste by the end of 2015 11

Goal 4. Reduce the EM legacy footprint by 40 percent by the end of 2011, leading to approximately 90 percent reduction by 2015 12

How We Do It – Management Goals 14

Goal 5. Improve safety and quality performance towards a goal of zero accidents, incidents, and defects 14

Goal 6. Improve contract and project management with the objective of delivering results on time, and within cost 16

Goal 7. Achieve excellence in management and leadership, making EM one of the best places to work in the Federal Government 18

Where Are We? – Measuring Progress and Accountability 20

Updating the Roadmap 22

DRAFT PRE-DECISIONAL

[Page left intentionally blank]

DRAFT PRE-DECISIONAL

Our Location – Where We Are

Overview of the EM Program

Fifty years of nuclear weapons production and government-sponsored nuclear energy research in the United States during the Cold War generated large amounts of radioactive wastes, spent nuclear fuel, excess plutonium and uranium, thousands of contaminated facilities, and contaminated soil and groundwater. During most of that half century, the Nation did not have the environmental regulatory structure or nuclear waste cleanup technologies that exist today. The result was a legacy of nuclear waste that was stored and disposed of in ways now considered unacceptable.

In 1989, DOE established the Office of Environmental Management (EM) to solve the large scale and technically challenging risks posed by the world's largest nuclear cleanup. EM built a new nuclear cleanup infrastructure, assembled and trained a technically specialized workforce, and developed the technologies and tools required to safely decontaminate, disassemble, stabilize, disposition, and remediate unique radiation hazards.

The Cleanup Challenge

EM Cleanup scope included the remediation and processing of about:

- 13 MT of plutonium
- 108 MT of plutonium and uranium residues
- 88 million gallons of radioactive liquid tank waste
- 2,400 MTHM of spent nuclear fuel
- 158,000 cubic meters of transuranic waste
- 1.4 million cubic meters of low-level waste and mixed low-level waste
- 450 nuclear facilities, 3,600 industrial facilities, and 900 radiological facilities

During its first 10 years, EM managed the most urgent risks, maintaining safety at each site while negotiating State and Federal environmental compliance agreements. Currently the program has about 40 cleanup agreements and is committed to meeting its obligations under these agreements. During the past several years, EM's record of meeting its compliance milestones has exceeded 90 percent. Missed milestones have been due to such factors as safety, project management, and competing priorities. During the first decade, the program also concentrated on characterizing waste and nuclear materials and assessing the magnitude and extent of environmental contamination.

In the late 1990s, the program shifted from managing risk into accelerating risk reduction. This effort marked a transition away from characterization and stabilization and into an active cleanup and closure program. During the past decade, EM has made substantial progress in nearly every area of nuclear waste cleanup, and continues to focus on reducing risk. Most recently, EM has received American Recovery and Reinvestment Act (ARRA) funding to create jobs while also accelerating cleanup by reducing the contaminated footprint, so the land and infrastructure can be made available for other uses.

More than 90 percent of EM's cleanup is accomplished through the use of contracts. EM strives to improve its acquisition, contract management and project management processes through application of best business practices. EM is standardizing the acquisition process as it

DRAFT PRE-DECISIONAL

transitions to performance-based contracts. It has organized its cleanup portfolio into discrete projects, which it manages in accordance with accepted industry practices and DOE directives.

Technology innovation, development, and deployment are key elements of the EM program. The Technology program has been designed to provide a best-in-class science and engineering foundation, technical assistance, and new technologies to resolve program uncertainties and risks in cleanup decisions, reduce costs, and accelerate schedules. An essential component of EM's technology program is its work with scientists and engineers from DOE's national laboratories, private industry, and academia. The focus of this program is on highly-radioactive tank waste processing, soil and groundwater characterization and remediation, and facility deactivation and decommissioning.

EM's cleanup would not be nearly as successful without the full involvement of its stakeholders, who provide insights and advice on how to best implement and improve the program. The program has Federal Advisory Committee Act chartered citizen advisory boards at eight cleanup sites. EM also supports working groups with the National Governors Association, the National Conference of State Legislators, the Energy Communities Alliance representing local governments at EM sites, and the State and Tribal Government Working Group. EM also works closely with its Federal and State regulators to ensure that cleanup is being conducted in accordance with the applicable laws, regulations, and compliance agreements, and in ways and according to schedules that protect public health and the environment.

EM's cleanup mission poses unique, technically complex, and costly challenges which can only be achieved through an exceptional workforce. The program has 40,000 Federal and contractor employees with the necessary skills and experience such that it is a world leader in the safe management and disposition of radioactive waste and nuclear materials and the remediation of contaminated facilities, soil, and groundwater.

Past Reviews of EM and Key Findings

In 1998, EM developed *Accelerating Cleanup: Paths to Closure*, a "projectized" approach to cleanup, which more fully defined the life-cycle scope and cost of the EM program. The report outlined the evolving EM cleanup program based on site-developed, project-by-project forecasts of the scope, schedule, and cost to complete cleanup. As a follow up to *Paths to Closure*, at the direction of the Secretary, the Assistant Secretary for EM conducted a *Top-to-Bottom Review* of the EM program and its management systems, with the goal of quickly and markedly improving program performance. The review, published in 2002, concluded EM's focus was on managing worker, public and environmental risks, rather than actually reducing or eliminating those risks.

Following the recommendations of the *Top-to-Bottom Review*, EM committed itself to extensive management reforms and re-focused programmatic objectives. Since that time, EM has pursued the recommendations of the *Top-to-Bottom Review* and it has been the primary focus of EM leadership to build a best-in-class capability in EM for contract and project management.

The aggressive innovations of EM leadership for improving EM's performance were in initial stages of implementation when, in FY 2006, the House and Senate Appropriations Committees

DRAFT PRE-DECISIONAL

requested in the FY 2006 appropriations bill that the National Academy of Public Administration (NAPA) conduct a management review of the EM program. EM leadership strongly supported NAPA's proposals, which focused on organization and management, human capital, acquisition, and project management, and immediately began implementing them. The NAPA recommendations continue to play an important role in EM's organizational development.

The Government Accountability Office (GAO) designated DOE's contract management as a high-risk area in 1990. Based on progress over the past two years, GAO has narrowed the scope of this high-risk area to focus on EM and the National Nuclear Security Administration. While GAO recognizes EM has demonstrated progress implementing corrective actions, it still believes a number of projects are at risk in meeting cost and schedule goals, particularly because of the quality of cost estimates.

EM's Progression

As identified in "*Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War*" (DOE/EM-0001, January 2009), the EM Program has made substantial progress in every area of nuclear materials and waste management and environmental remediation, and it has done so in a safe and compliant manner. In addition, it has implemented business systems that can support the efficient conduct of this multi-billion dollar enterprise. This progress has been the result of an evolution to best-in-class processes and practices.

The "Journey to Excellence" is premised on stabilizing the program to a best and sustainable way of carrying out the mission using a business model that places authority and accountability closest to where the actual work occurs—in the field. At the same time, the Headquarters roles have been aligned to strengthen its policy and planning functions and provide organizational best practices across the complex. This model was developed with the following objectives in mind:

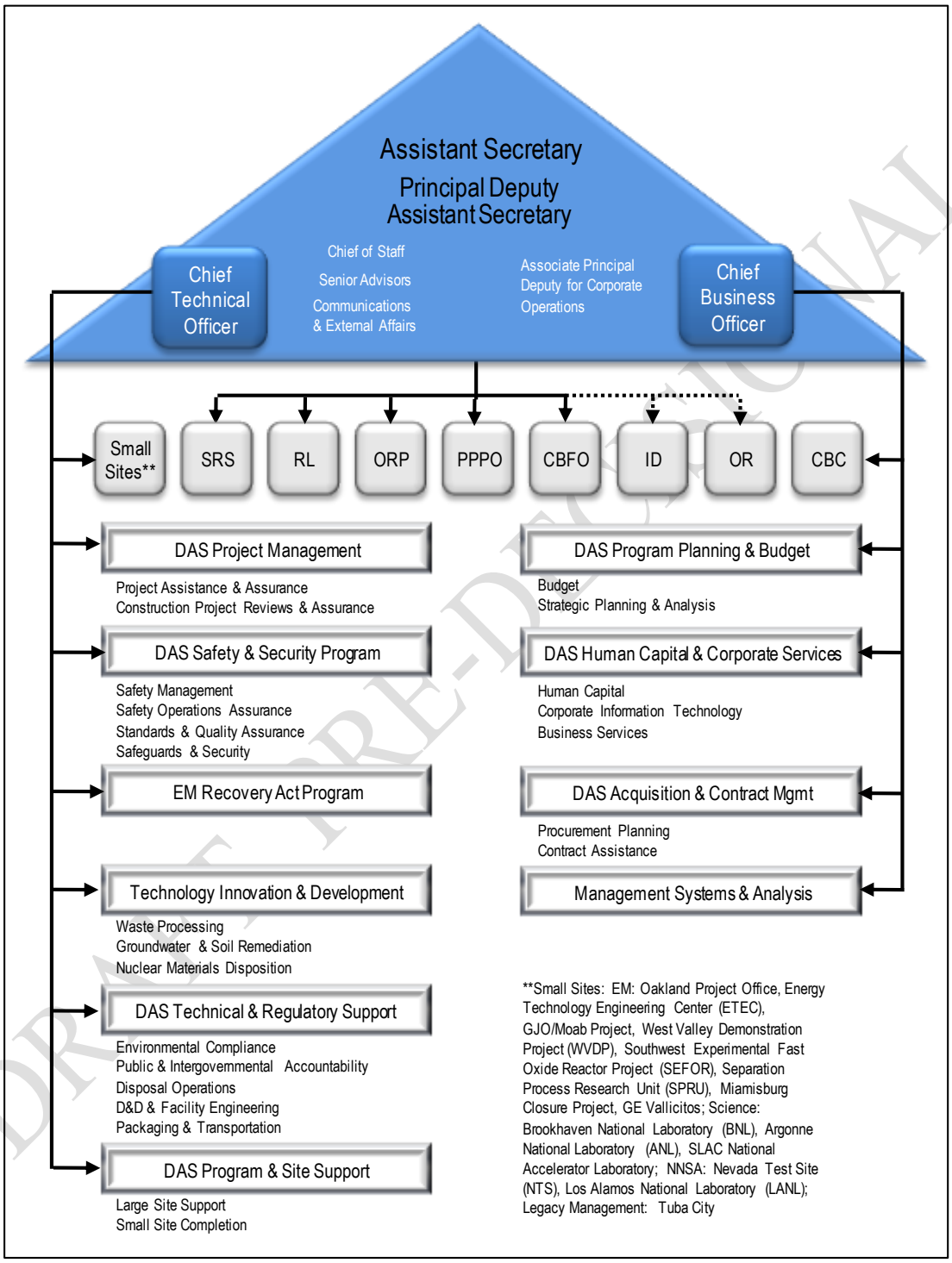
- Continue highly focused efforts that correspond to established program goals and priorities
- Improve the ability to deliver projects safely, on time, and within cost
- Create a better alignment between the Field and Headquarters
- Clarify roles and responsibilities
- Strengthen accountability
- Emphasize and support initiatives important to the Administration
- Accomplish the alignment with minimal disruption to EM staff.

EM's Organization

The EM Leadership Pyramid and supporting organizational structure has been designed to emphasize the role of the field in accomplishing EM's mission, to successfully deliver on program commitments, and to be held accountable by the Administration, Congress, tribal nations, stakeholders, and the public at large. The Chief Officers, by having fully integrated organizations led by Deputy Assistant Secretaries (DAS) and Office Directors, translate the Assistant Secretary's requirements into more strategically packaged and coordinated guidance to

DRAFT PRE-DECISIONAL

the Field. Ultimately, the work is accomplished in the Field by contractors with the oversight of the Field Managers and their staffs.



DRAFT PRE-DECISIONAL

EM's Priorities

EM prioritizes activities that safely treat and disposition the largest number of curies per volume, such as, liquid tank waste, because they reduce the most significant environmental, safety, and health threat EM faces. Thus, the following are the program's priorities.

Program Priorities

- Essential activities to maintain a safe, secure, and compliant posture in the EM complex
- Radioactive tank waste stabilization, treatment, and disposal
- Spent nuclear fuel storage, receipt, and disposition
- Special nuclear material (SNM) consolidation, stabilization, and disposition
- Transuranic (TRU) and mixed/low-level waste disposition
- Groundwater and soil remediation
- Excess facilities deactivation and decommissioning (D&D)

Where We Are Going – Destination

EM Mission

To safely transform the environmental legacy of the Cold War into assets available for the Nation's future by completing quality cleanup work on schedule and within cost, delivering demonstrated value to the American taxpayer.

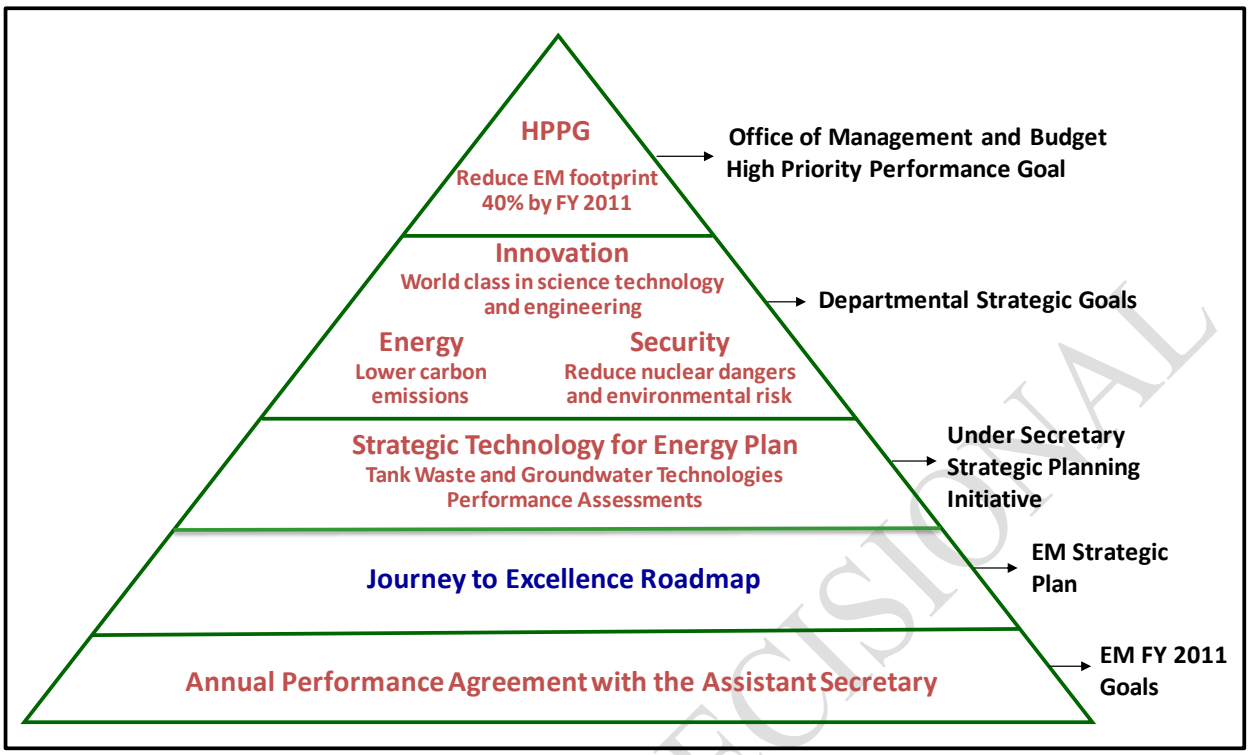
EM Vision

To be viewed as one of the best managed government programs and the employer of choice in the Federal Government.

How Do We Get There – Our Goals

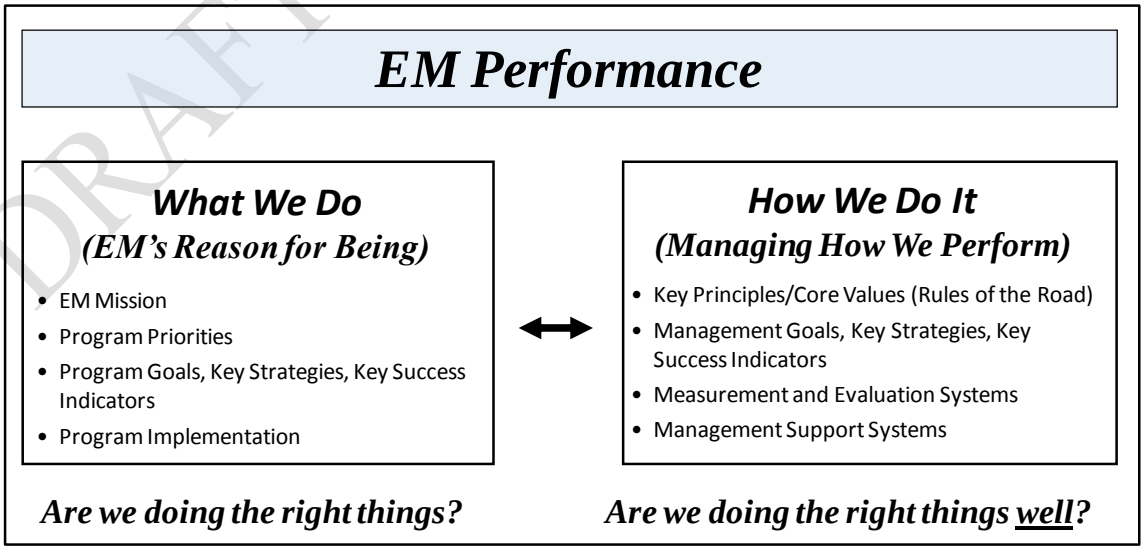
To fulfill our mission and achieve our vision, we have developed a set of goals that define the steps to help lead us to our destination and guide us on our Journey to Excellence. These goals were developed in the context of and in support of Administration and Departmental policies, strategies, and initiatives as shown in this figure.

DRAFT PRE-DECISIONAL



Hierarchy of Strategic Goals

The goals fall into two related categories—those that are programmatic (what we do) and those that are managerial (how we do it), as illustrated in the figure below. There are four program-related goals and three management-related goals. The following sections outline these goals, enumerating the key strategies for achieving each goal and key success indicators for measuring achievement of the goal. The pursuit of these goals will be based on continuous process improvement using X-teams as appropriate. X-teams are an external focused and adaptive methodology to solve complex technical problems. It was developed at the Massachusetts Institute of Technology and senior EM management has been trained on its use.



DRAFT PRE-DECISIONAL

What We Do – Program Goals

Goal 1. Complete the three major tank waste treatment construction projects within the approved baselines.

EM has millions of gallons of highly-radioactive liquid tank waste. Processing of the highly-radioactive tank waste located across the DOE complex makes up over 30 percent of the life-cycle cost of the EM Program. Completing the construction and commencing the operation of three facilities to process the liquid waste is crucial to the success of the EM program since they will stabilize this waste into a safe, stable form for ultimate disposal. In addition, DOE remains on GAO's High-Risk List because large capital asset projects, such as these, struggle to meet cost and schedule expectations. EM will successfully achieve this goal by acquiring the best resources and managing and safely implementing these projects in the most effective and efficient manner (see related Goal 6).

The Sodium Bearing Waste Treatment Facility at the Idaho National Laboratory will process 900,000 gallons of sodium bearing waste (500,000 curies) currently stored in four 300,000-gallon underground tanks onsite. These tanks are between 35 and 45 years old and are located directly above the Snake River Plain Aquifer, a major source of drinking and irrigation water, in concrete vaults of a design that present structural safety issues. The 1995 Settlement Agreement with Idaho requires DOE to "cease-use" of the tank farm facility tanks by December 31, 2012.

The Salt Waste Processing Facility (SWPF) at the Savannah River Site will process 37 million gallons (379 million curies) of high-level radioactive tank waste currently stored in 49 tanks onsite. Processing this waste is required to meet regulatory commitments for waste removal and closure of Savannah River Site radioactive liquid waste tanks. These tanks will not meet future requirements for secondary containment that go into effect in 2014. When operational, the SWPF will separate the highly radioactive cesium and actinides from the salt solution. After completing the initial separation process, the concentrated radioactive liquid waste with cesium and actinide waste will be sent to the nearby Defense Waste Processing Facility where it will be vitrified. The remaining salt solution will be mixed with grout at the nearby Saltstone facility for disposal onsite. SWPF operation also supports EM mission goals for disposition of legacy wastes by greatly reducing the number of vitrified waste canisters and significantly reducing tank closure life cycle schedule and costs.

The third project, the Waste Treatment and Immobilization Plant (WTP), is being constructed to process and stabilize up to 53 million gallons (176 million curies) of waste currently being stored in 177 underground storage tanks on the Hanford Site. Most of these tanks are single-shell tanks, with some dating back to the 1940s. The project consists of four large individual facilities: 1) a Pretreatment Facility that separates the waste into high-radioactivity (small volume) and low-radioactivity (large volume) fractions, 2) a Low-Activity Waste Vitrification Facility, 3) a High-Level Waste Vitrification Facility, and 4) an Analytical Laboratory. In addition, the project includes construction of infrastructure needed to support operation of the WTP facilities, such as chiller plants, steam plants, and air compressor facilities.

DRAFT PRE-DECISIONAL

Key Strategies

- Work with the Federal staff, contractors, and union representatives to ensure that the projects have the necessary tools (such as technology resources, innovative tools to maintain motivation, and a strong owner's presence) to succeed in the most efficient manner.
- Partner with national laboratories, industry, academia, and the Corps of Engineers to ensure the best scientific and engineering resources are used, so that the technologies selected for development and deployment and the design and construction approaches used will help reduce risk, lower cost, and accelerate project completion.
- Establish an integrated design/engineering testing and commissioning framework across the EM complex to support project teams and enhance technical decision-making.
- Use the Code of Record concept to only make project changes that are essential to project success.
- Use Construction Project Reviews to identify and assist in resolution of key project issues related to scope, cost, schedule, project risk management, and technical approach.
- Ensure the contract fee is aligned with completion of each capital asset.

Key Success Indicators

- Project cost and schedule performance indices are between 0.9 and 1.15, demonstrating that the project has acceptable performance with respect to cost and schedule. Ninety percent of Construction Project Reviews are performed as scheduled and results indicate fewer and fewer recommendations with each successive review.
- Ninety percent of Construction Project Reviews are performed as scheduled and results indicate fewer and fewer recommendations with each successive review.
- Ninety percent of Corrective Actions associated with recommendations identified in Construction Project Reviews are finished within six months of the completion of each Construction Project Review.
- Interim success parameters including schedule milestone metrics for each project are developed and evaluated monthly and can be used to predict project success.

Goal 2. Reduce the life-cycle costs and accelerate the cleanup of the Cold War environmental legacy.

Estimates for EM's life-cycle cost for the cleanup of the Cold War environmental legacy ranges between $272 billion and $327 billion, with a confidence level between 50% and 80%, respectively. The remaining cost ranges from $190 billion to $244 billion. The life-cycle cost for tank waste is between $88 billion and $117 billion, of which only $18 billion has been spent to date. In addition, EM estimates cleanup will be completed between 2050 and 2062. With this remaining cost and schedule in front of us, there are many opportunities to make investment decisions that will significantly reduce the life-cycle cost and accelerate cleanup.

As the EM's life-cycle baseline indicates, high-level waste accounts for approximately 32-36 percent of the total EM cleanup cost, and is the major contributor to EM's cleanup liability. In

DRAFT PRE-DECISIONAL

addition, the amount of funding that is available to apply to "on-the-ground" cleanup work is limited by the amount of security, surveillance, infrastructure, and overhead costs (i.e., "hotel" costs) to maintain the hundreds of nuclear and radiological facilities across the complex. Achieving less expensive hotel costs at the majority of EM sites requires reducing the number of nuclear and radiological facilities and remediating the contaminated soil and groundwater underneath these facilities.

Therefore, two key strategic initiatives will be the focus of Goal 2 in the next several years. These are Enhanced Tank Waste Treatment and Footprint Reduction. EM will focus its technology development and deployment (TDD) investments to mature the science and technology associated with tank waste processing, treatment, and waste loading. In addition, EM will leverage base funding to deploy mature tank waste processing technologies to enhance the current tank waste cleanup approaches. For example, EM's Tank Waste Integrated Project Team recommended seven major transformational strategies to reduce the life-cycle cost and length of program execution. Several of these have been adopted at Savannah River and at Hanford. EM believes it can reduce the life cycle cost by $3 billion and the life cycle schedule by 6 years at SRS and by $16 billion and 7 years at Hanford.

EM has formed an Enhanced Tank Waste Strategic Team under the leadership of the Associate Principal Deputy for Corporate Operations. This team consists of key members from EM Headquarters, Hanford, and the Savannah River Site who will integrate and focus efforts to mature and deploy the necessary technologies to accelerate the tank waste mission. Some examples of these efforts include taking a mobile, modular approach to tank waste treatment, using rotary microfiltration and small column ion exchange at-tank treatment technologies to eliminate the need for costly additional treatment plants; investigating the viability of alternative treatment processes such as Fluidized Bed Steam Reforming to generate a mineralized waste form with higher "single pass" capture of problematic radionuclides (i.e., technetium-99 and iodine-129); increasing radioactive glass loading and processing throughput to reduce tank waste canister production and processing schedules; and developing next generation melters such as cold crucible or advanced joule-heated melters to improve waste processing.

EM will also provide the Blue Ribbon Commission on America's Nuclear Future (BRC) with information on its current plans and potential enhancements to assist the Commission with its work.

For footprint reduction, EM has successfully tested the concept of investing in accelerated cleanup completion at sites with no further DOE mission or discrete areas of large operating sites. Most recently, EM has used ARRA funding to accelerate soil and groundwater remediation, transuranic and low-level waste disposition, and to perform decontamination, decommissioning, and demolition of facilities years sooner than these activities were scheduled to occur. Removing contamination, dispositioning waste, and reducing the site footprint will avoid costs by reducing security, surveillance, maintenance, infrastructure, and overhead that otherwise would continue for years to come.

EM estimates that such footprint reduction measures already undertaken will save more than $4 billion and avoid another $3 billion in life-cycle costs while also making lands and facilities

DRAFT PRE-DECISIONAL

available for other uses. The processes used to successfully carry out ARRA cleanup activities, those used subsequent to the Top-to-Bottom Review, and other innovative concepts will be studied and implemented as appropriate with the goal of reducing life-cycle costs. More specific and nearer-term footprint reduction strategies are discussed in Goal 4. For other mission activities, EM will continue to review its budget and program priorities to identify opportunities to achieve the greatest risk reduction benefit, meet its regulatory-compliance commitments, and to implement the best business practices in pursuit of cleanup progress.

EM will continue to work with the Congress, regulators, stakeholders, and tribal nations in evaluating how we meet our requirements to ensure we are applying them in the most effective manner, using state-of-the-art technologies. The existing regulatory framework enables the Department to operate its complex while at the same time carrying out its responsibilities under regulatory agreements to come into compliance with current environmental laws and regulations. EM will continue to review its cleanup agreements to identify strategies and actions, including those not foreseen at the time the agreements were signed, that can efficiently accelerate risk reduction.

Key Strategies

- Prioritize the TDD, base, and applicable Recovery Act funds to best achieve this goal.
- Integrate and manage the TDD investment and insert technologies at appropriate maturity.
- Continue to use the National Academy of Sciences, Environmental Management Advisory Board, EM Technical Experts Group, and the expertise of EM Federal staff to inform us on how best to achieve reductions in the life-cycle cost for the tank waste mission.
- Provide BRC information and cost benefits based on current plans and potential improvements.
- Use appropriate system planning models to demonstrate the benefit of deploying state-of-the-art technologies and/or more effective strategies in order to reduce the life-cycle cost of the tank waste cleanup mission.

Key Success Indicators

- Develop an EM Enhanced Tank Waste Strategic Investment Portfolio that prioritizes the TDD and base funds with the goal of accelerating the tank waste cleanup schedule by 6 years at Savannah River and 7 years at Hanford, and reducing EM's environmental liability and life-cycle cost by $3 billion at Savannah River and $16 billion at Hanford.
- Ensure that by the end of FY 2012, both Hanford and SRS baselines reflect the new transformational technologies required to support accelerating the schedule by 6 years at Savannah River and 7 years at Hanford, and reducing EM's environmental liability and life-cycle cost by $3 billion at Savannah River and $16 billion at Hanford.
- Identify funds for 2012 and 2013 to support the Enhanced Tank Waste Strategy.
- By the end of 2011, develop/modify a system-planning tool that illustrates the benefits of deploying state-of-the-art technologies and/or more effective strategies in order to reduce the life-cycle cost of the tank waste cleanup mission.

DRAFT PRE-DECISIONAL

Goal 3. Complete disposition of 90 percent of the legacy transuranic (TRU) waste by the end of 2015.

Management and removal of legacy TRU waste from generator sites directly supports risk reduction and the goal of reducing the EM site footprint. Achievement of this goal will also enhance DOE's strategic energy goals, by increasing public confidence that nuclear waste can be safely and cost-effectively transported and disposed. Goal 3 also contributes to reduction in EM life-cycle costs and further demonstrates DOE's proven ability to permanently dispose of legacy TRU waste inventories. As of the end of FY 2010, approximately 78,000 m^3 has been disposed from the collective TRU waste inventory as low-level, mixed low-level, contact handled (CH) TRU and remotely handled (RH) TRU wastes. The Recovery Act investment in TRU waste has reduced EM's life-cycle cost by $1.2 billion.

In 2010, the National TRU Waste Program prepared the TRU Waste Acceleration Plan to identify work that could be accomplished through base and Recovery Act funding. This plan provided an integrated and accelerated approach to working off TRU waste inventories across the DOE complex. Priority was placed in key areas such as meeting regulatory commitments and enabling site footprint reduction while maximizing the rate of TRU waste disposal through FY 2011. SRS was authorized to continue its TRU waste work using Recovery Act funding into calendar year 2012. The additional time will enable the completion of the entire TRU waste inventory at SRS.

A key expectation for this acceleration is that DOE sites prepare sufficient WIPP-eligible waste to sustain a rate of 30 CH and 5 RH waste shipments per week to fully utilize the waste handling and disposal capacities of WIPP. The Recovery Act funding and associated acceleration provided the opportunity for EM to pursue the longer term Goal 3 of completing disposition of 90 percent of the legacy TRU waste inventory by the end of FY 2015.

There are specific regulatory drivers for TRU waste disposition, such as the Idaho Settlement Agreement that requires all TRU waste and alpha contaminated low-level waste out of the State of Idaho by end of calendar year 2015. At Los Alamos National Laboratory, shipment of TRU waste supports a 2015 Consent Order milestone to complete cleanup in Area G. At Hanford, Tri-Party Agreement M-91 Milestones establishes requirements for TRU waste retrieval and characterization. At Oak Ridge, the Site Treatment Plan establishes milestones for TRU waste inventory processing and characterization. Goal 3 directly supports achievement of these, and other, enforceable regulatory commitments.

Critical to the success of Goal 3 is the continued use of mobile equipment and personnel to minimize costs for characterizing, certifying, and shipping TRU waste. A number of DOE sites have small amounts of TRU waste and/or lack the costly facilities necessary to package and characterize TRU waste for compliance with WIPP disposal requirements. The Central Characterization Program (CCP) deploys equipment and personnel across the TRU complex to retrieve, package and perform characterization and certification of TRU waste inventories. The CCP also loads and certifies all transportation packages of contact-handled and remotely handled TRU waste for shipment to the WIPP.

DRAFT - PRE-DECISIONAL

At the Idaho National Laboratory (INL), the Idaho Settlement Agreement, Mixed Waste Site Treatment Plan, and Hazardous Waste Permit allow the receipt of off-site waste as long as specific time constraints are met. Therefore, the CH TRU waste from some generator sites is being certified by the CCP for transportation to INL to be treated by AMWTP, if necessary, and certified by AMWTP or CCP for transportation to and disposal at WIPP.

This goal addresses the legacy TRU waste for which EM is responsible and which is currently planned for disposal at WIPP. This total volume is approximately 131,000 m^3. Goal 3 requires a cumulative total of about 118,000 m^3 to be disposed by the end of fiscal year 2015. To date, approximately 78,000 m^3 of legacy TRU has been disposed—either at WIPP as TRU or as low-level or mixed low-level waste at near surface disposal facilities; therefore, an additional 40,000 m^3 must be disposed through fiscal year 2015. The disposition of low-level and mixed low-level waste from the sites' legacy TRU waste inventories contributes to achievement of Goal 3. It is important to note that EM and other DOE programs continue to generate TRU waste requiring disposal at WIPP. While this newly generated volume is not specifically included in Goal 3, the disposition of these TRU wastes will be accommodated.

Key Strategies

- Centralize the characterization of small quantity sites' TRU waste in Idaho.
- Expand and enhance Central Characterization Program capabilities.
- Utilize shielded canisters to accelerate transportation and disposal of RH TRU wastes.
- Process and dispose of Large Box TRU, utilizing the TRUPACT-III.
- Align contract incentives at WIPP and TRU generator sites to support specific legacy TRU disposition targets each year.

Key Success Indicators

- Sustain a disposition rate of 8,000 m^3 per year from the legacy TRU waste inventory.
- Complete disposition of TRU waste at the eight small quantity sites identified in the CBFO TRU Waste Acceleration Plan by September 2011.
- Achieve site regulatory milestones related to legacy TRU disposition.
- Dispose of a cumulative total of 118,000 m^3 of legacy TRU waste by the end of fiscal year 2015.

Goal 4. Reduce the EM legacy footprint by 40 percent by the end of 2011, leading to approximately 90 percent reduction by 2015.

EM will achieve its footprint reduction goal[1] by completing major cleanup activities as required

[1] Footprint reduction is defined as remediation of an area and the immediately surrounding buffer zone, if necessary, such that cleanup has achieved all regulatory requirements (i.e., all soil contamination has been remediated, contaminated facilities dispositioned, and groundwater remediation system is in-place and operable) and whereby the previously affected land area may be made available for potential beneficial reuse, transitioned to long-term remedial operations, or made ready for transfer for long-term environmental stewardship.

DRAFT PRE-DECISIONAL

by regulatory agreements and accelerating closures within the targeted areas at two large sites (Hanford and Savannah River Site).[2] EM will also complete legacy cleanup at four smaller sites (Brookhaven National Laboratory [BNL], SLAC National Accelerator Laboratory [SLAC], the Separations Process Research Unit [SPRU], and GE Vallecitos). While these small sites do not provide major contributions to footprint reduction as measured in square miles, they represent full completion of cleanup requirements at the targeted sites and are major achievements relative to the overall EM mission. Footprint reduction will be accomplished through decontamination and decommissioning (D&D) of excess legacy facilities and soil and groundwater remediation at legacy sites. These maximize the reduction of environmental, safety, and health risks in a safe, secure, compliant, and cost-effective manner. Removal of contamination also reduces monitoring and maintenance life-cycle costs and liabilities.

A key strategy is to leverage ARRA efforts towards existing scope (debris removal, soil and groundwater remediation, facility D&D, and radioactive waste disposition) that can most readily be accelerated. These activities have an established regulatory framework and proven technologies.

Due to the environmental, safety, and health risks of EM legacy waste, EM's programmatic activities are monitored by various Congressional, State, and community stakeholders. Tracking and communicating progress to stakeholders is an important mechanism for allowing our stakeholders to validate and verify program performance.

Key challenges and constraints associated with the goal include an aggressive schedule (EM has targeted the end of FY 2011 for the expenditure of 90 percent of ARRA funds and to have not more than 10% of its authorized projects remaining for completion in FY12), constraints in flexibility on re-apportioning funds (ARRA mandates that all funds be obligated by September 30, 2010), and the availability of commercial options for mixed low-level waste and low-level waste treatment and disposal.

Key Strategies

- Utilize $6 billion from the American Recovery and Reinvestment Act.
- Work with regulators and stakeholders to ensure compliance and timely implementation of required cleanup actions.
- Focus on safe completion of EM activities (transuranic waste, low-level waste, soil and ground water, and D&D) resulting in reduced environmental risks to the community.

Key Success Indicators

- Reduce the active EM footprint from 931 to approximately 560 square miles by the end of FY 2011 leading to approximately 90 square miles by the end of 2015.
- Deliver on our compliance commitments (acceleration of 46 milestones by the end of FY 2011).
- Accelerate the legacy cleanup at BNL, SLAC, and SPRU to allow completion by the end of FY 2011.

[2] EM manages 35 square miles of property at sites other than Hanford and Savannah River, and the four small sites slated for completion by FY11. Footprint reduction is occurring at the other sites; however, none of those locations will result in completion of all EM responsibilities or significant reductions in square miles by FY11.

DRAFT PRE-DECISIONAL

How We Do It – Management Goals

Goal 5. Improve safety and quality performance towards a goal of zero accidents, incidents, and defects.

EM is committed to conducting quality work in a safe manner. Safety is our first priority; long-term experience in the nuclear field has shown that a safe workplace is also a productive workplace. Under the principles and constructs of Integrated Safety Management (ISM), EM has established mature processes that cost effectively accomplish the cleanup mission while maintaining a workplace protective of the public, environment, and the workforce. EM will strengthen/forge partnerships with industry to further improve these mature processes, e.g., EM participation in the Federal Workshop on Risk Assessment and Safety Decision Making held in September 2010.

This goal requires collaborative efforts of EM Headquarters and Field to ensure timely and meaningful Federal operational awareness and collaborative technically credible interaction with the contractors. This will result in continuous improvement of safety and quality performance throughout the EM complex. Trends in safety and quality assurance data, including lessons learned, will be assessed to identify emergent issues and conditions that require management attention. Where appropriate, EM will use existing tools and processes (e.g., Technical Authority Board) to take full advantage of resources currently applied to areas of safety and quality assurance.

EM maintains ISM System Descriptions and quality assurance (QA) plans that are up-to-date, responsive to EM's corporate requirements and expectations, and responsive to lessons learned. On an annual basis, the Field offices self assess the effectiveness of ISM Systems and QA programs and provide the results in an annual ISM System Declaration. In addition, EM provides annual guidance on establishing and measuring progress made on ISM and QA performance objectives, measures, and commitments. These are designed to promote continuous improvement and exceed DOE/EM established goals. Each EM site has begun implementation of a site-specific Quality Assurance Program (QAP) that is graded to the complexities and risks associated with its mission. The QAPs have strengthened the stability and clarity of EM's QA expectations. Each EM site has committed to self assess the effectiveness of their QAP using consistent corporate QA performance objectives and criteria. EM will analyze safety and quality performance indicators that are applicable to the variety of operations found at EM sites and that can be adopted, at each level of organization, to define lessons learned and identify emergent issues/conditions that require management attention.

EM interacts closely with Defense Nuclear Facilities Safety Board (DNFSB) members and their staff. We closely track actions to resolve issues identified in DNFSB letters and recommendations. In addition to the regular interactions between EM personnel and DNFSB staff, EM senior management, led by the Assistant Secretary, meets with the Board monthly to address safety and quality issues that are of interest to the Board. EM will use periodic

DRAFT PRE-DECISIONAL

interactions with the Field to ensure we are effective in anticipating potential DNFSB interest areas and keeping the Board abreast of actions taken to resolve issues. The EM Technical Advisory Board and other means will be used to facilitate issue resolution where Headquarters assistance is necessary to ensure consistency between EM sites or to clarify policy questions related to safety or QA. Lastly, EM-20 is performing a CY 2010 assessment of how annual ISM Systems validations could be used in evaluating DNFSB advice for discernable trends.

EM maintains ISM System Descriptions and QA plans that describe safety and QA processes and how these processes are integrated to perform work safely. ISM has matured and changed to reflect the experience and lessons learned through nearly 15 years of implementation at the Department of Energy. The first key strategy under this goal is partly directed at defining a suite of proactive performance indicators that can be applied on a contract-by-contract basis. To retain our focus on safety management systems, EM will develop a more concise statement of ISM that is consistent with a matured process defined within the Directives system.

Field Managers review and accept the safety risks that high-hazard operations may pose toward workers and the public; however, without an updated risk assessment policy and associated requirements and guidance, EM lacks a strong basis for defending the results from quantitative risk assessments performed for its defense nuclear facilities. This was the premise upon which the Secretary of Energy approved the Implementation Plan for DNFSB Recommendation 2009-1, *Risk Assessment Methodologies at Defense Nuclear Facilities*. EM has taken, and will maintain, a leadership role with implementation of that plan.

Key Strategies

- Ensure that EM sites and projects integrate safety and quality, and evaluate performance indicators that measure safety and quality, throughout the applicable life cycle including procurement, design, engineering, construction, commissioning, operation, deactivation/decommissioning, and environmental restoration.
- Use sound science and engineering along with developing a proactive relationship with the DNFSB to expeditiously resolve Board concerns and issues.
- Ensure EM Headquarters and Field elements continue to identify and deploy strategies and approaches that guarantee strong safety cultures are in place, such as Human Performance Improvement.
- Employ a risk-based decision-making process for operation and decommissioning of EM facilities.

Key Success Indicators

- Maintain an EM average Total Recordable Case (TRC) Rate of <1.3 and a Days Away from work, Restricted work or Transfer (DART) Case Rate of <0.6.
- Generate data on a contract-by-contract basis using a suite of performance indicators that can be evaluated for discernable trends.
- Achieve and maintain zero cases where poor quality assurance practices by vendors, subcontractors, and prime contractors results in the installation of defective equipment or software within EM nuclear facilities.
- Maintain zero overdue actions items resulting from DNFSB letters or recommendations, as identified in the DOE Safety Issues Management System.

DRAFT PRE-DECISIONAL

- Develop a concise statement that defines EM's vision that can be used to improve the effectiveness and focus of EM's annual ISM validation.
- Develop an interim EM risk informed decision-making policy and associated requirements and guidance, by the end of FY2011.

Goal 6. Improve contract and project management with the objective of delivering results on time, and within cost.

EM is committed to sound contract 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 a 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 contract and project management; developing and improving tracking systems, project and contractor performance data quality, and project outcomes; improving Federal oversight of contracts and projects; and improving processes and documentation of project Critical Decisions, award of new contracts, and managing contract changes.

In 2006, NAPA recommended significant structural and organizational alignment improvements in acquisition as well as project management. In February 2007, EM partnered with the U.S. Army Corps of Engineers and implemented improvements in project controls, baseline management, cost estimation, change control, schedule management, acquisition strategy and planning, contract change order management, and business clearance reviews. In February 2008, the EM Quality Assurance Corporate Board was chartered as the natural progression from the EM Quality Assurance Initiative begun in 2007. While the QA initiative is addressed more fully under Goal 5, it also is a key component for successful and sustained execution of these Goal 6 activities.

In spite of these efforts, EM remains on the GAO High-Risk List and large capital asset construction projects struggle to meet expectations. The Department's senior leadership remains fully committed to improving contract and project management across the Department and has challenged all Departmental organizations to get off the GAO High-Risk List. Only an integrated and sustained effort of continuous progress will demonstrate to GAO, Congress, and OMB that EM is a high performance organization striving to achieve excellence. Recently initiated discussions and dialogue with GAO are focused on demonstrating through transparency and accountability that EM has committed to show progress and achieve results, so that EM is removed from the High-Risk List.

Articulating clear policies and establishing standard practices on how we procure work, how we measure performance, and how we hold contractors accountable can bring clarity for contractors and employees on our expectations for excellence. Ensuring that our Contracting Officers and Federal Project Directors are trained to think and act as investors, strategists, developers, and contract (rather than contractor) managers, will improve their oversight capability.

DRAFT PRE-DECISIONAL

Implementing partnering arrangements with contractors as used by other Federal agencies can create win-win scenarios by opening communication channels where both parties understand and respect the rules of engagement and build better business relationships. Such relationships help shift the focus to achieving desired outcomes instead of finding mistakes; strengthens the owner role of Federal managers without compromising the expectation of performance and accountability from the contractor. By establishing a management goal aimed at improving contract and project management, EM as an organization and individuals within EM will be able to focus and align performance standards that drive day-to-day work and decision making that will lead to sustained improvements.

Not delivering projects on time and on cost make our life-cycle estimates questionable and our regulators more demanding. In the past, internal and external pressures contributed to starting projects pre-maturely when there were many unknowns. Lack of technical skills and poor contract oversight suggest we are weak owners. EM is firmly committed to demonstrating we are responsible stewards of taxpayer dollars.

Key Strategies

- Use the EM Contract and Project Management Corrective Action Plan as a starting point and create an internal quality assurance process that will lead to successful and sustained execution of EM contract and project management improvements.
- Improve and expand the use of independent contract and project reviews, construction project reviews, peer reviews, and external independent reviews to keep contracts and projects aligned and on track. Conduct verification and validation reviews to ensure that performance data is credible and reliable.
- Strengthen the integration of acquisition and project management processes so that contract statements of work and deliverables are based on clear project requirements, robust front-end planning, and risk analysis, ensure that nuclear safety requirements are addressed early, and changes to contract and project baseline and the contract are managed through strict and timely change control processes.
- Complete restructuring of the EM cleanup projects into smaller, more definitive capital projects and non-capital operations activities. Adhere to DOE Order 413.3 for planning and execution of capital assets and follow the same discipline for managing the non-capital asset operations activities e.g., establishing approval authorities, performance goals and metrics, project director designation, and change control procedures.
- Become a stronger owner by holding contractors accountable, pursue partnering relationships to create win-win scenarios, where both the Federal staff and contractor staff understand and respect the rules of engagement and build better business relationships. Also, build stronger relationships with oversight organizations to improve communications and demonstrate transparency and accountability in EM's contract and project management.
- Develop EM specific cost estimating policy, guidance, historical cost databases, and expertise to improve our ability to perform Independent Government Cost Estimates as well as Independent Cost Reviews and Validation of contractor-generated cost estimates.
- Invest in personnel development by providing training and career development in contract and project management.

DRAFT PRE-DECISIONAL

Key Success Indicators

- Obtain EM removal from the GAO High-Risk List.
- Complete 90 percent of capital asset projects within 10 percent of original cost and schedule performance baselines unless otherwise impacted by a directed change.[3]
- Maintain at least 98 percent of project performance data reporting in IPABS/PARS II error free.
- Approve contract performance baselines within 180 days from contractor's final accepted submission.
- Finalize 80 percent of change orders within 180 days.
- Negotiate 100 percent of project changes that require contract modifications in advance of Acquisition Executive approval.
- Ensure life-cycle costs for the current EM program portfolio do not increase unless there is new work scope.
- Implement partnering agreements for all major contracts.
- Increase the percentage of projects with certified FPDs and certified contract specialists at the required level.

Goal 7. Achieve excellence in management and leadership, making EM one of the best places to work in the Federal Government.

Of all goals, this is one of the most challenging as we all have our own perspectives on what makes EM one of the best places to work in the government. To realize this, each individual will have a "seat at the table" to contribute to achieving this goal.

It will involve examining EM's management practices from an external as well as internal perspective. Understanding just how well we are performing now is a necessary first step towards improvement. The basic approach to reaching this goal is to examine the available organizational reviews and surveys that assess EM and other Federal agencies and design a program for continuous improvement based on the current state of EM relative to this goal.

To fully realize the benefits of our new business model, EM is strengthening its leadership capabilities in visioning, sense-making, relating, and inventing and will focus on those attributes typically associated with management excellence: leadership, planning, performance tracking, work/business processes, customer service/relations, and accountability. One tool leadership will be using is the application of techniques associated with X-teams designed to improve teamwork results.

Employee surveys provide a useful tool in measuring worker satisfaction and can help EM become an employer that can attract and retain the caliber of talent required to carry out its highly technical mission. Each year, DOE participates in the Employee Viewpoint Survey

[3] Directed Change: Changes, 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.)

DRAFT PRE-DECISIONAL

(EVS) administered by the Office of Personnel Management (OPM). This survey assesses the employee's satisfaction with leadership policies and practices; work environment; rewards and recognition for professional accomplishment, and personal contributions to achieving organizational mission; opportunity for professional development and growth; and opportunity to contribute to achieving the organizational mission. EM employees have identified leadership, culture, and communication as low-scoring areas that need particular attention. Management will focus on those workplace attributes that employees care about the most. Current initiatives include 360-degree evaluations of managers and executives based on input from employees as well as peers, stakeholders, and others that provide targeted survey information important to that individual's improvement in management and leadership skills.

In addition, the Partnership for Public Service (PPS) and American University's Institute for the Study of Public Policy Implementation use data from OPM's survey to rank agencies and subcomponents on a Best Places to Work index score, which measures overall employee satisfaction, an important indicator of employee engagement and productivity. Agencies and subcomponents are scored in 10 workplace environment "best-in-class" categories such as effective leadership, employee skills/mission match, and work/life balance. DOE ranked 19th in 2009 and fell to 22nd in 2010 out of 31 large Federal agencies. EM will use this scoring to identify and benchmark the best-in-class Federal agencies while providing an important annual indicator towards improving employee satisfaction.

External and internal reviews are another source of important information in our pursuit of this goal. For instance, in December 2007, NAPA concluded a comprehensive 19-month interactive management review of the EM program, which examined the areas of organization and management, human capital, acquisition, and project management. EM leadership strongly supported the proposals NAPA provided throughout the review. At the conclusion of the review, NAPA stated, "The Panel is optimistic that with the changes underway, EM is on a solid path to becoming a high-performing organization. With the Department's support, it needs to ensure that it has the resources necessary to turn this opportunity for organizational improvement into reality."

Key Strategies

- Benchmark best-in-class agencies (the Nuclear Regulatory Commission ranked number one in this year's PPS survey) and develop improvement plans in the areas of leadership, planning, performance tracking, work/business processes, customer service/relations, and accountability.
- Utilize the Federal EVS, the PPS Survey, and follow-up targeted surveys such as 360-degree evaluations to address those attributes of management and leadership that EM must direct particular attention to if it is to become best-in-class in the Federal Government.
- Create an EM Continuous Improvement Program that incorporates all lessons learned from previous oversight reports to improve the efficiency and effectiveness of EM operations.

DRAFT PRE-DECISIONAL

Key Success Indicators

- Develop a Continuous Improvement Program and performance improves as measured through regular reviews.
- Based on the EVS working group recommendations develop and implement a plan designed to improve EM's year-to-year survey results.

Where Are We? – Measuring Progress and Accountability

Measuring progress and accountability includes analyzing the expected benefits of the programs included in the performance budget request to Congress; tracking, reporting, and analyzing performance measurement data; conducting in-depth evaluations of programs; and providing results of analyses and evaluations for use in planning and allocating resources. EM's analyzing and evaluating processes involve all parts of the organization. Performance measurement data includes performance measures in the DOE budget, performance-based contracts, and performance data related to EM financial operations, human resources, facilities, and customers. Analysis of performance data includes whether goals were achieved, verification and validation of performance levels, and external factors that may have influenced performance. Performance information is tracked and reported throughout the year, with year-end results reported in DOE's Annual Performance Report (APR) and in other EM Program evaluations. In addition, EM develops corrective action plans and generates reports for those items where reported performance does not meet commitments. This information is required quarterly in the Department's corporate metrics database and EM's Integrated Planning, Accountability, and Budgeting System (IPABS), and annually in the APR.

Project Baselines

The EM mission is implemented using project (capital) and program (operating) baselines to show how individual EM projects/programs contribute to overall completion of site cleanup. EM previously defined projects at higher level Project Baseline Summaries (PBS) which included both capital and operating scopes of work. These PBSs were decomposed into lower level capital projects and operating activities to better define scope, manage the work, and report progress. This decomposition was completed in June 2010. Capital projects continue to be managed according to DOE Order 413.3A, however, EM prepared and implemented a Protocol for the Management of Operating Activities in April 2010, which proscribed a more traditional approach to managing operations, based on performance metrics.

EM Headquarters establishes the policies and programmatic strategies to meet the EM mission, while the Field is responsible for incorporating the EM mission, policies, and strategies into its planning, budgeting, implementing, and analyzing and evaluating activities. In an effort to bring EM more in line with the intent of American National Standards Institute (ANSI) 748 for organization of work, EM developed and implemented a Corporate Work Breakdown Structure (WBS) in August 2010, which will be used to link budgeting, project management, and strategic planning and alternatives analysis. Level 4 of this WBS will be the interface between the corporate planning and management structure and the site-level work breakdown structure.

DRAFT PRE-DECISIONAL

Baselines define the planned scope, schedule, and cost for each EM project/program, and provide a basis for managing and measuring performance. Baselines also describe the current estimate of the scope, schedule, and costs for each site to complete the cleanup program. The baseline includes workscope for which EM has made key site cleanup decisions pursuant to CERCLA, RCRA, the National Environmental Policy Act, or other statutes, and workscope where EM has yet to make such decisions. Sound baselines support the preparation of defensible budgets, development of meaningful performance measures and contract incentives, establishment of accountability, as well as provide a basis for controlling scope and cost growth.

The Field typically maintains the project baseline as a collection of documents, cost-loaded schedule networks, cost estimates, and documented assumptions. The Field develops the specific content of EM baselines. Baselines are independently validated, with Headquarters in the lead and participation by the Field. After validation, EM maintains the baselines under configuration control. Headquarters approves the critical decisions for the projects and approves appropriate baseline changes at levels defined by the configuration control procedures. In select cases, the authority to approve critical decisions and change actions is delegated to field executives.

Performance measures and key milestones are defined as part of the baseline. The Federal Project Director, with the assistance of the contractor, defines the major performance metrics required for management and control of the project. EM Corporate Performance Measures along with performance measures required by the contractor to implement the contractor's management system are incorporated into project baseline documentation.

Performance Measurement, Tracking, Evaluation System

Project managers conduct comprehensive evaluations of their projects/programs, supported by analysis and by objective reviews and recommendations done by panels of experts (merit review/peer review). The frequency, regularity, scope, and breadth of independence of these reviews depends on the nature of the work, the degree of technology change or evolution, the performance and results, and interest among stakeholders. Results of these reviews help complete the program management cycle by feeding forward into the next planning and budget cycle.

Monthly reports provide a forum for the discussion of program progress to EM management along with required status reports from the Field. The EM Budget Office performs monthly reviews to provide a financial perspective on funding status. In addition, Field sites provide a mid-year budget execution briefing to EM Headquarters on their funding/expenditure rates to provide early insight into financial trends potentially resulting in the need for reprogramming, work slowdown, or other corrective actions. Large projects report their progress during Quarterly Project Reviews.

EM uses IPABS as a performance-based approach to meet information management needs, and to support other core business processes. IPABS supports the standardized application of EM's project management practices. EM uses IPABS to interface with DOE and other Federal agency systems, such as the Office of Engineering and Construction Management's Project Assessment

DRAFT PRE-DECISIONAL

and Reporting System (PARS), and the Central Internet Database. With the rollout of PARS II, IPABS will pull necessary capital project baseline and performance data from it to avoid having the Field enter the same data twice. Use of IPABS reduces redundancy and the need for individual information requests. IPABS streamlines access to EM information, and addresses how EM implements program responsibilities established in DOE Order 430.1, Real Property Asset Management, as well as other DOE and OMB program management guidance.

Annual Performance Agreement with the Assistant Secretary

The Performance Agreement documents EM's final annual performance commitments after the Congressional budget appropriation process. It establishes annual fiscal year specific commitments and measures related to the goals and strategies contained in the Roadmap for EM's Journey to Excellence. The Performance Agreement is signed by EM's leadership team and is their collective commitment to each other and the EM organization at large as to what will be accomplished for the given fiscal year. Appropriate commitments will be incorporated into individual manager's performance review standards.

To maintain focus, a sense of urgency, and to have a real impact on performance, there will be periodic reviews of progress, discussion of difficulties encountered, and agreement on appropriate actions. These reviews will be held between the Assistant Secretary and/or his/her designees and EM managers.

Employee Performance Standards

Accountability for performance and results ultimately resides at the individual (both supervisory and non-supervisory) employee level. To hold managers accountable for accomplishing EM's goals and objectives, performance measures and commitments are reflected in Headquarters, Field Manager, and employee performance elements, standards, and subsequent evaluations (in accordance with DOE Order 331.1B, *Departmental Employee Performance Management System*. Managers review employee performance in accordance with applicable rules, personnel policies, and union agreements. Performance should be measurable, accountable, and traceable to performance plans, objectives, and commitments. Managers conduct annual reviews with a formal mid-point review and final review of the preceding year's performance at the completion of the performance cycle.

Updating the Roadmap

This document represents EM's long-range strategy. The specific details of how EM will achieve its goals and objectives are described in the multi-year program plan, operational plans, and budgets prepared by the program offices and laboratories. Success will be measured against performance indicators in this Roadmap, the Annual Performance Agreement with the Assistant Secretary, performance-based contracts, and other performance tracking documents.

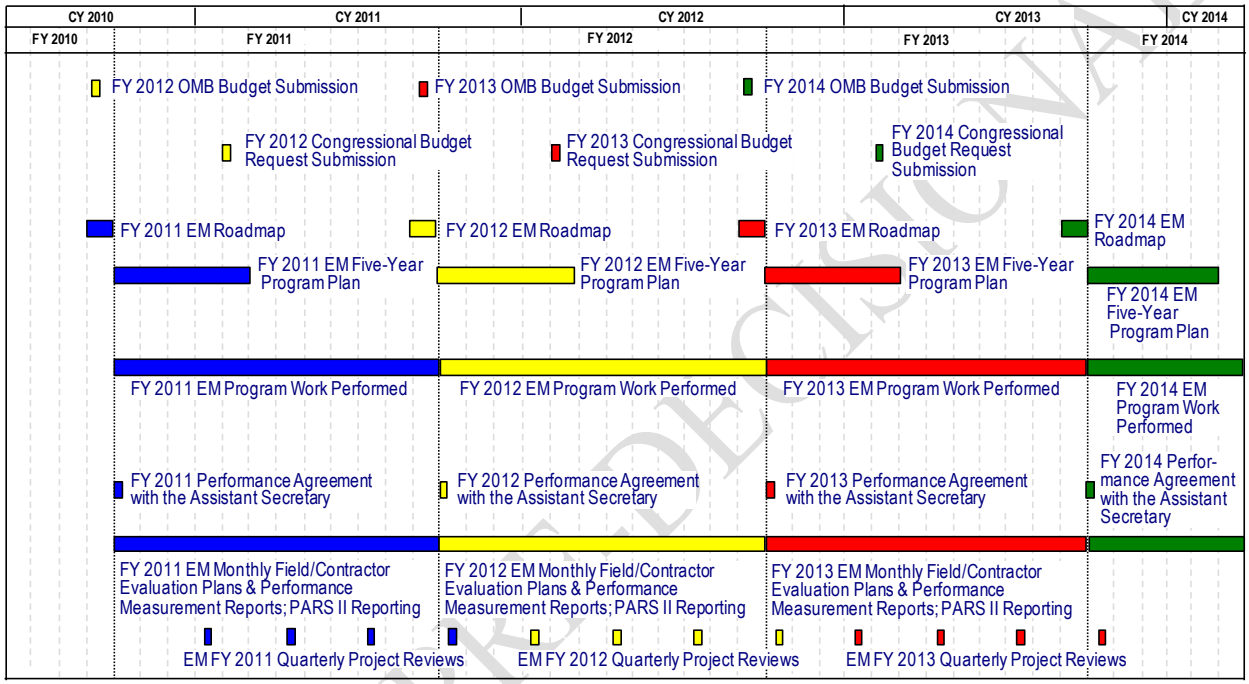
A calendar of EM's key planning and budgeting efforts and their relationship with the Office of Management and Budget and Congressional budget processes is shown below. During any given

DRAFT - PRE-DECISIONAL

year, the EM is addressing planning, budgeting, and program evaluation activities that span four separate fiscal years.

This Roadmap represents work in progress. The future will be different than we picture it today, with new technologies, new laws, new barriers, and new opportunities. It is essential that we anticipate and accommodate such change. Strategic planning is therefore a continuous process; our plan will be reviewed at least annually and revised as appropriate.

EM Planning, Budgeting, and Evaluation Multi-Fiscal Year Key Activities



DRAFT PRE-DECISIONAL

[Page left intentionally blank]

DRAFT PRE-DECISIONAL

[Inside back cover]

Contact Information

The Office of Environmental Management's Roadmap for the Journey to Excellence serves as the foundation for both our daily decision-making and long-term goals. We welcome the views and suggestions of individuals and organizations that have an interest in our program. Please send comments to the following address:

U.S. Department of Energy
ATTENTION: Office of
Environmental Management
1000 Independence Ave., SW
Washington, DC 20585

To obtain a copy of this document on the Internet, visit http://www.em.doe.gov/Pages/EMHome.aspx

For print copies of this report, or any other DOE/EM publications, contact:

U.S. Department of Energy
ATTENTION: Office of
Environmental Management
1000 Independence Ave., SW
Washington, DC 20585

Phone: (202) 586-7709
Fax: (202) 586-7757
Email: EMRoadmap@hq.doe.gov

U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585-0121

DOE/xxxxxxxxxxxxx
October 2010

Printed with renewable-source ink on paper containing at least 50% wastepaper, including 20% post-consumer waste.

Visit Our Websites

- U.S. Department of Energy
  http://www.energy.gov/
- Environmental Management
  http://www.em.doe.gov/Pages/EMHome.aspx
- Office of Civilian Radioactive Waste Management
  http://www.energy.gov/environment/ocrwm.htm
- Office of Legacy Management
  http://www.lm.doe.gov/home.aspx
- Office of Nuclear Energy
  http://www.ne.doe.gov/
- Office of Science
  http://www.sc.doe.gov/
- National Nuclear Security Administration
  http://nnsa.energy.gov/
- Office of Energy Efficiency and Renewable Energy
  http://www.eere.energy.gov/
- Office of Fossil Energy
  http://www.fossil.energy.gov/
- Office of Electricity Delivery and Energy Reliability
  http://www.oe.energy.gov/
- Office of Health, Safety and Security
  http://www.hss.doe.gov/
- Congressional and Intergovernmental Affairs
  http://congressional.energy.gov/
- Office of Inspector General
  http://www.ig.energy.gov/

Other Relevant Sites

- The Whitehouse
  http://www.whitehouse.gov/
- USA.gov
  http://www.usa.gov/index.shtml

DRAFT PRE-DECISIONAL

[Back cover]
[Page left intentionally blank]

DRAFT PRE-DECISIONAL