



# Office of Environmental Management

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*Human Capital Management Plan*

*August 2006*

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## Executive Summary

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The mission of the Office of Environmental Management (EM) is to complete the cleanup of 108 contaminated nuclear weapons manufacturing and testing sites across the United States (U.S.) by 2025. EM has made significant progress in recent years and marks a major milestone in 2006 – completing as many as nine sites by the end of 2006. Our vision is to safely and cost-effectively clean up the legacy of the nation's nuclear weapons program using a highly qualified, motivated, and career-oriented workforce that manages at least 90 percent of its projects under cost and on schedule. We will issue 11 new major acquisitions/contracts over the next two years that will provide the necessary incentives and strong management oversight to realize this vision.

EM's human capital vision is to be an employer of choice with a well-trained, inquiring, and motivated workforce that will excel. The EM Human Capital Management Plan (HCMP) describes our mission and objectives, vision, human capital strategies and implementing framework, as well as a number of ongoing and new initiatives. We are implementing an integrated human capital system that plans and executes human capital activities across the EM complex. These activities include short- and long-term planning, assessment of skill deficits and surpluses, and the development and implementation of mitigating measures, including employee development and acquisition of new talent.

### EM Human Capital System

EM has established the Human Capital System (HCS) to ensure that we develop and utilize a strong core of operating principles based on recognized attributes of high-performing organizations. The principles emphasize safety, diversity, competence, long-term perspective, performance, career-orientation, and high morale. Our HCS performs three essential functions:

- Ensures that we address skill gaps that affect the EM mission through ongoing assessment.
- Concentrates our efforts on training, qualifying, and certifying our existing workforce to enhance the leadership, management, and technical competencies necessary for a high-performing organization with a long-term mission.
- Ensures that we are always in a position to recruit experienced and junior employees who will enhance contemporary skills, as well as provide a pipeline to the future.

Activities of the HCS span workforce planning, staffing management, workforce restructuring, staff augmentation, diversity, succession planning, and employee involvement.

The HCS supports the President's Management Agenda (PMA), the Office of Personnel Management (OPM) Human Capital Strategic Framework and Standards for Success, the Department of Energy's (DOE) Strategic Plan, and DOE's Human Capital Management Strategic Plan. It is aligned to our strategic goals and objectives and to our policy imperatives.

To implement our HCS, EM will employ a variety of tools to attract, acquire, develop, and retain a highly qualified and motivated workforce, and we will address any skill gaps that may arise from attrition in an aging workforce. We will ensure that our projects are managed by skilled, competent, and dedicated leaders and staff, with a rigorous certification program for Project Managers. To provide effective oversight, key acquisition and technical personnel will have knowledge of technical issues, project management, and business management at an equivalent level of expertise as their contractor counterparts.

### Skill Gaps and Workforce Planning

EM is preparing workforce plans related to basic activities - such as project baseline summaries - for all sites and Headquarters (HQ) to support the fiscal year (FY) 2008 budget request for program direction. The HCS will institutionalize this process for all future budget preparation. We plan to validate the workforce plans by September 30<sup>th</sup> of each year beginning in 2006.

Our HCS will ensure that we are executing an integrated, systematic, and complex-wide approach in managing workforce, paying strict attention to Full-Time Equivalent (FTE) allocation, monitoring, and management. We have developed and are strictly implementing a hiring management process. The HCS will continue to support EM's unique approach of using the Voluntary Separation Incentive Payment (VSIP) and Voluntary Early Retirement Authority (VERA) to restructure our workforce across the EM complex based on expected mission changes and the new work processes, roles and responsibilities that come with new contracting strategies.

The Consolidated Business Center (CBC) consolidates and integrates business infrastructure support for selected EM sites in financial, logistics, information resources, human resources, contracting, and legal service areas and provides specialized technical expertise through its Closure Cadre. The HCS will take advantage of this valuable resource. Our HCS also supports innovative strategies to address our FTE staffing needs, such as filling positions for short-term needs with limited-term appointments or detailing existing staff. EM has invested heavily in developing leadership capability through training and mentoring to fulfill certification requirements, build upon existing skills, and acquire new skills.

EM is committed to locating, attracting, and retaining qualified minorities in our workforce. The HCS will ensure that we employ a diversity strategy that identifies and addresses any cultural, ethnic, and gender disparities across the EM complex.

EM strongly believes that people are the key to program success. Our leadership and managers at all levels are firmly committed to communicating effectively with employees and to involving them meaningfully in the process for carrying out our mission. We will make every endeavor to delegate appropriate authority to the appropriate level, as we recognize that employee morale and empowerment have a critical impact on the operation of a high-performing and productive organization. We will use several processes to continuously monitor skill gaps and surpluses created by policy changes and mission completion, such as the annual workforce planning process and special teams to conduct focused and directed skill gap analyses.

During FY 2005-2006, EM identified acquisition and contracting, project management, and technical disciplines as critical to its mission, both in the near- and long-term, and we conducted several detailed studies to provide us with a comprehensive view of skill gaps in these areas. In addition to the major areas listed above, we also examined support areas such as: budget, human resources, and legal services. While there are currently no widespread shortfalls in these areas, each site is carefully reviewing projected retirements to ensure that no staffing issues emerge.

### Employee Development

EM is carrying out concerted efforts to train, qualify, and certify its existing workforce to enhance our competencies and become a high-performing organization. There are numerous "tools in the EM toolbox" to assist in that development.

- Technical training and certification programs
- Executive leadership training
- Formal education classes and case study workshops
- Mentoring/coaching and 360° feedback analysis
- Employee development programs and diverse work assignments

As part of our emphasis on safety, we offer the Technical Qualification Program (TQP), which includes the Senior Technical Safety Manager (STSM) Program. We are fully involved in DOE's efforts to establish and implement a corporate accreditation process and plan for TQP based on the Institute of

Nuclear Operations (INPO) model. We plan to fully implement the accreditation process when formally approved. By January 2007, we will implement the new STSM training developed by the National Training Center.

EM will also use the DOE-established Nuclear Executive Leadership Training (NELT) for its Managers and Deputy Managers from the Operations/Field Offices and Deputy Assistant Secretaries (DASs). This five day in-residence program provides structured supplemental training to improve participants' capacity to fulfill safety and leadership responsibilities. EM has also developed a new standard operating policy and procedure (SOPP) SP-5.15, which requires its managers to satisfy STSM qualification and the NELT training as a requirement for delegation of safety authority.

In addition, EM is currently supporting the certification of our incumbent Federal Project Directors (FPDs). All incumbent line item FPDs were certified by the Certification Review Board (CRB) by May 31, 2006, a major accomplishment for both the individuals and the organization as a whole. We will continue to focus on certification to better balance the management of our projects with the demonstrated skills of our project director community. To this end, we have funded several series of Project Management Career Development Program (PMCDP) courses dedicated to EM employees. We will also continue to assess the FPD "pipeline" in order to properly plan for attrition and succession.

There are many other professional training opportunities available to staff from HQ and the sites:

- Approximately 50 employees will receive basic and intermediate cost estimating/cost analysis training. Following this course, several employees will be selected to continue their development toward a professional certification. We will use the Defense Acquisition University (DAU) to certify our contracting staff based on education, experience, and training. Training and certification activities at the Field Offices will be monitored for both existing contracting staff and new recruits.
- EM continues to implement our Executive Development Program (EDP) for senior executives with a combined focus on management and leadership competencies and developmental activities. We are also developing a complex-wide leadership development program for non-supervisory employees for implementation later this year.
- EM is planning specific training for our senior managers to become well versed in project management through EM's Advanced Acquisition and Project Management Perspectives (AAPMP) Program. This program provides in-depth perspective on selected EM programmatic or acquisition events and their mission impact, with a focus on project management successes and breakdowns.
- EM is also encouraging participation in training programs for employees at the GS-5 through GS-15 level in areas such as leadership, problem solving, interpersonal skills, oral and written communication, and technical competence.
- The EM HQ Quality Assurance Program Plan (QAPP) requires our senior leadership, HQ managers, and selected technical employees to receive specialized management training. All EM HQ Federal employees are required to take general online training on Quality Assurance (QA) and on our HQ QAPP by December 31, 2006.
- EM is encouraging internal and external training to ensure technical currency in its staff in areas including hydrology, geology, soil and groundwater remediation, decontamination and decommissioning, waste packaging and transportation, fire protection, nuclear criticality, chemistry, and environmental monitoring. We encourage active participation by our employees in technical and professional societies and forums to keep our employees current on advances in their technical fields and to encourage information exchange with peers.

The recently completed Federal Technical Capability Panel (FTCP) workforce and gaps analysis for 2005 shows approximately 62 gaps in different technical disciplines. The data will be reviewed and actions taken to ensure that all sites are adequately staffed. Our sites have already initiated recruitment activities for experienced safety professionals. In immediate terms, EM has an estimated need for approximately

20 new Contract Specialist, GS-1102 positions at various locations across the complex. A corporate hiring process is currently ongoing.

In addition to hiring, EM is using innovative strategies to deploy and develop needed expertise. The centrally located Closure Cadre, comprised of individuals with extensive experience and expertise in closure management, is available to assist sites on a flexible basis. Several Closure Cadre employees are currently deployed on assignments to different sites. EM also plans to establish an EM Corporate Career Intern Program that will serve as a pipeline for the development of future leaders, critical technical experts, and support personnel. In the interim, we may use existing DOE intern programs to bring new interns onboard.

Over the next five years, EM will face a daunting human capital challenge. We will experience significant staff reductions and realignments as a result of site closures and diminishing work scopes just as our stores of institutional knowledge are diminished with the increasing number of retirements. To address this long-term challenge, we have embarked upon aggressive programs to provide both our existing and newly hired employees with training and mentoring so that a pipeline to the future is maintained.

## 1.0 Introduction

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To successfully accomplish our challenging cleanup mission, the Office of Environmental Management (EM) is committed to building a high-performing organization and implementing an integrated Human Capital Management Plan (HCMP). Our efforts are multi-dimensional. First, we are focusing on acquisition by creating new organizational structures to manage both our acquisition and contracting processes. Second, we are focusing on successful execution of our contracts with credible and cost-validated baselines, placing significant emphasis on improving project management skills and striving to be as technically competent as our contractors in all relevant disciplines. Third, because we face the challenge of an aging workforce and succession planning, EM is creating an effective Human Capital System (HCS) that provides the workforce necessary both now and in the future to accomplish the cleanup of Department of Energy (DOE) sites.

This Plan describes EM's ongoing efforts in establishing and implementing the HCS, which enables us to monitor and identify any potential skill gaps as they arise and take the necessary steps to fill them. The Plan also addresses important management initiatives to ensure that the ongoing cleanup continues in a safe, technically proven and effective manner through training and certification of the existing workforce and recruiting and hiring seasoned, experienced personnel and interns. It also outlines a number of other initiatives and programs that are being undertaken to achieve these results.

- Section 2.0 presents our mission and objectives for improving acquisition and contracting processes, project management, and human capital management.
- Section 3.0 describes components and strategies of the EM HCS.
- Section 4.0 identifies the three critical areas for the successful accomplishment of our mission and discusses the skill gaps in these areas. It also describes our efforts to improve the organization's project management capabilities.
- Section 5.0 discusses training and employee development, two high priority areas in the program.
- Section 6.0 describes EM's efforts in acquiring new talent and developing a talent pool to the future.
- The Appendices include human capital demographics, summaries of the human capital status at major sites, and 2005 Federal Technical Capability Program (FTCP) data. The data reflect a snapshot of a very dynamic situation within EM. Because of continuous changes, the numbers reflected in this Plan may differ from the current status within the program.

## 2.0 Mission/Objectives

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The mission of EM is derived primarily from DOE's strategic themes and goals:

**Strategic Theme 4 - Environmental Responsibility:** *Protecting the environment by providing a responsible resolution to the environmental legacy of nuclear weapons production.*

**Goal 4.1 Environmental Cleanup:** *Complete cleanup of the contaminated nuclear weapons manufacturing and testing sites across the United States.*

DOE has a strategic theme of providing a responsible resolution to the environmental legacy of five decades of nuclear weapons development and government-sponsored nuclear energy research. The EM program has made significant progress in shifting away from risk management towards a "mission completion" philosophy based on cleanup and reducing risk. While we have made great progress in recent years in the cleanup and closure of sites, EM marks a major milestone this year when as many as nine currently open sites will be completed by the end of 2006. In addition, we will continue to maintain a focus on site completion, with an additional eight sites or areas to be completed by 2009.



***EM's mission is to complete the cleanup of the contaminated nuclear weapons manufacturing and testing sites across the United States.***

In addition to its emphasis on site closures, EM is also focusing on longer term activities required for the completion of the cleanup program. These include:

- Constructing and operating facilities to treat radioactive liquid tank waste into a safe, stable form to enable ultimate disposition.
- Securing and storing nuclear material in a stable, safe configuration in secure locations to protect national security.
- Transporting and disposing of transuranic (TRU) and low-level wastes (LLW) in a safe and cost-effective manner to reduce risk.
- Packaging spent nuclear fuel (SNF) for disposal in a geologic repository.
- Decontaminating and Decommissioning (D&D) facilities that provide no further value to reduce long-term liabilities and remediate the surrounding environment.

We will be engaged in planning, awarding, and executing eleven new major acquisitions/contracts over the next two years.

1. Hanford Central Plateau Mission Support
2. Hanford Central Plateau Waste Storage and Disposition
3. Hanford Central Plateau Tank Farms
4. Savannah River Site (SRS) Management and Operations
5. SRS Liquid Waste
6. West Valley Demonstration Project (WVDP) Interim End State
7. Waste Isolation Pilot Plant (WIPP) Transportation Carrier Acquisition
8. Portsmouth D&D
9. Oak Ridge
10. Moab Mill Tailings
11. Advanced Mixed Waste Treatment Plant

## 2.1 OBJECTIVES AND STRATEGIES

EM plans to accomplish its mission by refining and improving its internal business processes in the areas of safety, environmental compliance and remediation, project management, performance, occupational health, contract planning and execution, and human capital. While we are taking immediate steps in these areas, our approach also puts processes into place that will allow EM to address future needs in critical areas whenever they arise.

EM is committed to the highest standards of safety and will maintain and demand the highest safety performance in all its activities, both for employees and for the larger community. We will improve the safety-related skills of the work force through the Federal Technical Capability Program (FTCP). We will institutionalize the practice of safety reviews early in the design process and utilize constant real-time feedback on lessons learned. EM will also provide additional levels for oversight of certain selected projects.



***Safety Is A Cornerstone  
In The Execution Of Good  
Project Management***

To systematically promote a stronger focus on project management, we have set a goal that at least 90 percent of EM's projectized portfolio will meet or outperform cost and schedule targets. EM will integrate operational, management, and oversight tools into regular project planning and execution.

To improve the acquisition process, EM is developing an "acquisition machine", a business process that allows procurements to be treated as part of an ongoing system rather than as a series of unrelated individual activities. This process will integrate procurement planning and project management leading to more effective management of contracts.

In the area of workforce planning, EM is integrating its human capital management strategies into all aspects of its decision-making processes. This approach begins by ensuring that the HCMP and all of its associated objectives and milestones are linked to the DOE mission, strategy, and goals. EM will attract, hire, develop, and retain a highly qualified and motivated workforce to support its mission and avoid any potential skill gaps that could arise as more workers become eligible for retirement. We will ensure that our projects are managed by highly skilled, competent, and dedicated leaders and staff, with rigorous certification programs for our Project Managers and a positive work environment that includes career development opportunities for all employees and rewards for superior performance. A central goal for the workforce is for all key acquisition and technical personnel to have knowledge of technical issues, project management, and business management at an equivalent level of expertise as their contractor counterparts, to enable them to provide effective oversight.

### ***EM VISION***

***Safely and cost effectively clean up the legacy of the nation's nuclear weapons program using a highly qualified, motivated, and career oriented workforce that manages at least 90 percent of its project on cost and on schedule.***

## 3.0 Human Capital System

### 3.1 EM HUMAN CAPITAL SYSTEM (HCS)

EM has established an HCS to ensure that we transform into a high-performing organization and create a means to sustain that performance over the long term. The HCS is based on the concept of a successful organization that has employees who are motivated by their work and by the work environment; a competent and capable workforce that clearly understands the priorities and the goals of the organization; a diverse workforce that is able to work together to accomplish the mission; and effective management of the work utilizing project management principles. We have institutionalized and will routinely assess our operating principles to ensure we are functioning as a high-performing organization.

*An organization is only as good as its people.*

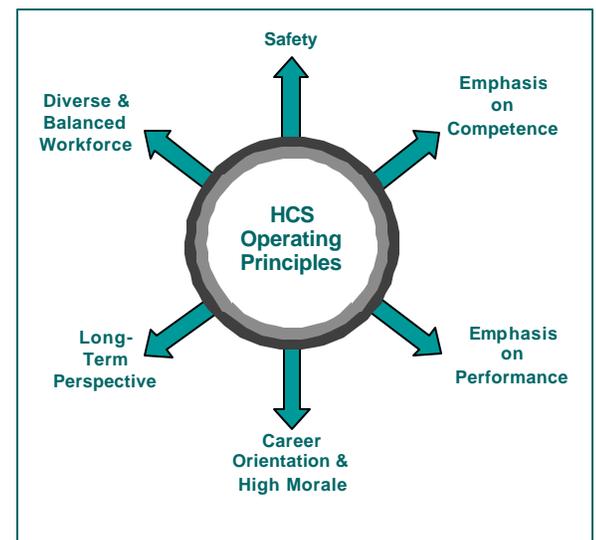
*Assistant Secretary  
James Rispoli  
February 2006*

#### Operating Principles

The HCS Operating Principles include the following (see Figure 3-1):

- **Safety:** Safety will be the highest priority for all EM workers, whether they are Federal workers or contractor workers.
- **Diversity:** EM will employ a balanced and diverse workforce.
- **Emphasis on Competence:** EM will place great emphasis on enhancing the skills and talents of its employees through certifying, qualifying, and training its workforce, so that each employee is making measurable contributions to the mission.
- **Long-Term Perspective:** EM will ensure that its career-oriented workforce will continue to be available to successfully complete our long-term mission.
- **Performance:** EM is committed to establishing and executing accurate and validated baselines with a goal of 90 percent of projects performing within cost and on schedule, and meeting or exceeding all performance measures. We will ensure that trained and skilled managers and workers are available for the execution of all projects.
- **Career-Orientation and High Morale:** EM is committed to having well-trained and professionally competent employees who are motivated and enthusiastic. Only with such a workforce can EM be a high-performing organization.

Figure 3-1. HCS Operating Principles



## 3.2 FUNCTIONS OF THE HUMAN CAPITAL SYSTEM

The HCS performs three essential functions for ensuring that EM understands the skill gaps that may emerge in the course of our operations and is capable of taking the necessary measures to address them:

- Skill Gap Assessments: Ensures that EM monitors, recognizes, and addresses any skill gaps that could affect the EM mission through ongoing assessment.
- Employee Development: Concentrates our efforts on training, qualifying, and certifying our existing workforce to enhance the leadership, management, and technical competencies necessary for a high-performing organization with a long-term mission.
- Skills Acquisition: Ensures that EM is always in a position to recruit experienced and junior employees who would enhance contemporary skills, as well as provide a pipeline to the future.

These three functions are briefly described below and detailed in later sections of this Plan.

### Skill Gap Assessments

The most vital component of EM's human capital efforts is the ability to ascertain which critical skill sets are needed today and are forecasted as essential three to five years in advance to meet our mission needs. EM conducts skill gap assessments on an ongoing basis to ensure our ability to address any gaps in a measured and responsive manner. EM employs several different methods for assessing skill deficits and surpluses.

1. A team method is used when a quick and focused skill gap assessment is needed to support a policy change or a technical or programmatic issue.
2. Detailed skills assessment processes are conducted through the annual site workforce plans.
3. The annual FTCP process also identifies technical skill gaps.

Together, these processes provide EM with a sound picture of its skill deficits and surpluses. Results of the latest efforts are discussed in detail in Section 4.0.

### Employee Development

EM understands the need to continuously enhance the technical, leadership, and management skills of our existing workforce on an ongoing basis to ensure that EM remains a high-performing organization. Regular training, qualifying, and certification programs allow EM to maintain a competent and highly-trained workforce ready to complete the department's mission. Certification and qualification are distinguished from regular training in that they refer to a more formal and auditable program and are a pre-condition to performing certain functions. Training is an organized activity through which EM employees acquire new or additional knowledge in new or existing areas of use and application. The term "training" refers to formal training as opposed to on-the-job experience. EM has put several extensive programs in place to provide certification, qualification, and training to all levels of our organization, from senior leadership to new interns, in order to satisfy specific mission needs. These programs are described in detail in Section 5.0.

### Skills Acquisition

EM uses the HCS to ensure that we are in a position to recruit both experienced and junior employees who can both enhance contemporary capabilities and provide a pipeline to the future. Recruitment satisfies two aspects of EM's long-term human capital plans necessary for our mission. We recruit experienced employees to meet specific immediate mission needs. We also hire comparatively junior employees, new graduates, and interns to create and maintain a pipeline of highly qualified and trained employees. These employees will be expected to be well versed in all the challenges and opportunities that are inherent in the operations of a large technical program. Section 6.0 details EM's recruiting efforts.

## **3.3 IMPLEMENTING FRAMEWORK**

### Strategic Alignment

EM is responsive to the requirements of the President's Management Agenda (PMA), Office of Personnel Management (OPM), and DOE's Human Capital Management Strategic Plan, in addition to EM's strategic planning and policy imperatives. The HCMP is directly linked to DOE's mission, strategy, and goals. EM has made a serious commitment to link performance to the management of its programs and mission accomplishment, as well as to the budget. This commitment is reflected in various efforts being undertaken with respect to performance management and development and execution of EM's budget and their linkages to human capital. We have major initiatives in the areas of project management and management systems, and human capital management is a key component of these initiatives. EM is setting up an "acquisition machine" to ensure that EM's procurements are treated as part of an ongoing process, rather than individual seemingly first-of-a-kind efforts. To provide continuing leadership and guidance to this effort, EM created the Deputy Assistant Secretary (DAS) for Acquisition and Project Management.

EM is also committed to the strategic goal of successfully executing all its contracts with credible baselines and reaching a goal of 90 percent of our projects performing at or below cost and on schedule. EM has designated officials at the highest level of the organization to ensure accountability for management of EM's human capital. To ensure accountability and to provide leadership in the strategic management of human capital, EM created the position of the DAS for Human Capital and Business Services. We also made a strategic commitment to have a well-trained, balanced, and diversified workforce. EM has reorganized its structures at Headquarters (HQ) to implement this strategic alignment.

### Milestones

- |   |          |
|---|----------|
| ➤ Reorganize HQ.  | May 2006 |
| ➤ Establish the DAS for Acquisition and Project Management. | May 2006 |
| ➤ Establish the DAS for Human Capital.                      | May 2006 |

### Human Capital Management and Budget

EM believes it is critical that human capital management has intrinsic linkage with annual budgets and short- and long-term workforce planning. Currently, workforce plans are prepared by the Field Offices and HQ with varying degree of formality and rigor. EM is bringing serious attention and rigor to the preparation of workforce plans for all sites and HQ so that the FY 2008 budget request for Program Direction will be supported by the workforce plans. All large EM sites have already developed or are in the process of developing their workforce plans. For example, Savannah River and Richland have finalized their workforce plans. These plans are linked to the site program management plans or equivalent documents and to the FY 2007 budget and include a longer-term perspective. These plans will be reviewed by a working group consisting of human capital experts from HQ and the sites, as well as other DOE offices. Based on these plans, EM will develop guidelines and policies for future workforce plans for all sites and HQ.

Since the workforce plans are linked to the program management plans or equivalent documents, they are related directly to the work that needs to be performed. The plans are generally based on units of

work, such as project baseline summaries (PBSs), which reflect the scope, cost and schedule to complete the EM mission. All support functions are also directly and indirectly related to the PBSs. EM workforce plans cover a five-year period for planning purposes and are updated annually to address changes in mission, work scope, and policies. The workforce plans act as an instrument of skill gaps assessment on an annual basis, and in conjunction with other activities such as the FTCP analyses, provide EM with a system to keep up-to-date with skill gaps information.

The completion of all of the workforce plans will result in an integrated Federal human capital baseline that is aligned to the DOE and EM corporate mission and goals and supports the Federal staff budget request. This Federal baseline will directly tie Federal scope of work and resources and ensure that they are aligned, and the program direction requests for all sites and HQ will be supported by the human capital baseline starting with the FY 2008 budget request.

**Milestones**

- Savannah River and Richland Workforce Plans completed. FY 2006 Q2
- Validation of all workforce plans. FY 2006 Q4
- Program direction input for FY 2008 Budget Request. FY 2006 Q3

EM will ensure that workforce roles and responsibilities are clearly defined and tied to site and HQ missions on a continuing basis so that the workforce plans reflect the currency of mission, the needs based on the current situation, and the progress made in accomplishing the mission. All sites and HQ will have established documentation aligning roles and responsibilities with the site and HQ mission statements, goals, and objectives by the end of FY 2006.

**Milestones**

- Complete an employee/manager survey that indicates that respondents are clear on their roles and responsibilities. FY 2006 Q4
- All site managers and DASs certify the definition and assignment of roles and responsibilities. FY 2006 Q4
- Beginning in FY 2006, conduct an annual review of all site and HQ documentation to ensure alignment with site/HQ mission statements, goals, and objectives. FY 2006 Q4
- Work with the National Academy of Public Administration (NAPA) on clear definition of roles and responsibilities and connection to the mission. FY 2006 Q3
- Beginning in FY 2006, conduct a review of position descriptions (PDs) to assess how well the PDs reflect roles and responsibilities identified in DOE and EM missions. FY 2006 Q4

Along with roles and responsibilities, EM will ensure that all component organizational structures reflect changing mission needs and that the components align human capital with the work to be completed. EM will conduct organizational reviews and verify alignment with the EM mission. Corrective action plans will be provided where needed that can be tracked and implemented.

**Milestones**

- Conduct site and HQ organizational reviews bi-annually. FY 2006 Q4
- Coordinate with NAPA on organizational structures. FY 2006 Q3

EM is also conducting a detailed review of the resource planning process at HQ. This analysis will include a functional analysis. EM has established a team of human capital specialists for this purpose.

**Milestones**

- Complete analysis of the HQ resource planning. August 2006

Finally, to support human capital management and budget, EM will design and implement the capability to collect and report skills possessed by current employees. EM will establish a baseline and targets for usage, matches, and improvement. EM will monitor the success of the pilot skills bank implementation at the Richland Operations Office. EM will explore implementing a corporate EM-wide skills bank capability based on lesson learned from Richland.

#### Milestones

- Review pilot skills bank implementation at Richland. FY 2006 Q4
- Evaluate implementation of a corporate EM skills bank. FY 2006 Q4

#### Employee Development

EM recognizes that for a complex organization with an enduring mission, continuous employee development is the key to being a high-performing organization. This continuous learning links to organizational goals and fills certain identified competency gaps. EM is carrying out concerted efforts in training, qualifying, and certifying its existing workforce to enhance its competencies to meet the expectation of becoming a high-performing organization. Even seasoned executives with decades of experience are being required to refine their skills and stay current on new information in their field of expertise. EM is using a variety of employee development instruments, such as technical training and certification programs, executive leadership, case study workshops, mentoring/coaching, and 360 degree feedback analysis. EM is also developing creative approaches to address succession planning and workforce planning for the future. EM needs to focus on replacing the skills of the “retirement ready” employees by training others and recruiting and integrating new employees into the EM workforce.

#### Milestones

- Develop and implement training and development programs. Ongoing
- Conduct ongoing evaluation and analysis of ongoing programs for effectiveness and for establishing new programs to address emerging needs. Ongoing

#### Performance Excellence and Leadership

EM has committed itself to improving the quality of work outputs, more efficiently and effectively servicing its customers, building the trust of its stakeholders, and holding its leaders and employees accountable for their contributions to the EM program. To achieve this, EM has cultivated a workforce culture that sets high expectations and high-performance standards, a workforce that imposes upon itself performance values that commit each employee to do his/her part, and a performance environment that stretches the imagination and creativity.

Essential to EM's human capital planning is capable leadership with relevant competencies and skills to provide the effective guidance and direction to the EM workforce. Initiatives, such as executive coaching and mentoring, have been implemented to strengthen the performance of the existing core of leadership. In addition, through succession planning, the present leadership will recognize potential future leaders within the workforce and will provide leadership training and developmental opportunities to nurture and develop them.

EM will establish a competency based leadership program incorporating many existing programs. EM has established and is implementing several competency based leadership development programs. These leadership training and development programs are based on leadership competencies (tied to EM-specific requirements), encompass all levels of leaders, and are merit based. EM will undertake activities to assess leadership competencies, to identify high-potential candidates from its staff, and to develop a program based on existing executive coaching/mentoring and development programs.

EM will work with the DOE Chief Human Capital Officer (CHCO) to incorporate EM leadership development needs in the DOE leadership development program beginning in FY 2007 Q3. Additional (EM-specific) developmental activities may include an executive mentoring/coaching program, a rotational

assignment program within EM to provide exposure of future leaders to other areas of work, and a program that enables the transfer of corporate knowledge when employees leave EM.

EM has recently conducted organizational assessments at several of its sites. These sites included Savannah River, Richland, and Carlsbad. EM's program is a first-of-its-kind for DOE. It was designed to strengthen the leadership of the organization. An organizational assessment is the first step in implementing a leadership development program at the site. EM's assessment program is complex-wide. A diverse team, including former DOE executives, EM HQ personnel, and contractor subject matter experts (SMEs), conduct the assessment. The key inputs to the assessment include a review of key documents which have been completed, a leadership team 360 degree review, an organizational assessment survey, and observations and interviews. The assessments result in a summary of findings and recommendations for leadership and organizational development. The results are used by the site management to initiate actions to address weaknesses and to build upon the organization's strength. Richland and Savannah River have established teams to improve organizational effectiveness and foster positive culture change. EM plans to conduct organizational assessment of all its sites with followup assessments every 2 years.

#### Milestones

- Develop and administer an annual employee/manager survey (or OPM Federal Human Capital Survey). Establish baseline and target for improvement. FY 2006 Q4
- Working with the DOE CHCO, incorporate leadership development needs in the DOE leadership development program. FY 2007 Q3
- Conduct four site assessment each year. Annually

#### Staffing Management

EM is executing an integrated, systematic, and complex-wide approach in managing its workforce. EM gives strict attention to FTE allocation, monitoring, and management. EM has developed and is strictly implementing a hiring management process to ensure sites follow their staffing plans (SPs), maintain FTE allocations, and use the hiring process to address mission critical skill gaps. The hiring management process is also used to assist potential displaced employees at closure sites. EM provides closure site employees priority referral for reassignment to vacancies within the EM complex. As a vital component of EM's transition efforts, this policy has greatly reduced the numbers of employees that were involuntarily separated at time of closure.

#### Workforce Restructuring

EM developed a one-of-a-kind approach to using the Voluntary Separation Incentive Program (VSIP) and Voluntary Early Retirement Act (VERA). EM is using this approach to restructure the workforce across the EM complex based on expected mission changes, new work processes, and new roles and responsibilities reflecting new contracting strategies. It also reflects budget projections for Federal staffing levels in the outyears. This multi-year buyout plan identified targeted positions by series, grade, and year when the work of a position would be completed or when it needed to be restructured based on mission accomplishment. To maximize use of buyouts and assist in meeting EM's future staffing ceilings, EM uses a "rolling window" of opportunity for buyout offers, which provides the incumbent of a position identified for a buyout with a date by which he/she must retire/resign. The "rolling window" fosters better use of the buyout tool in managing human capital and FTEs. This affords a maximum amount of time for an employee to make his/her decision while still resulting in a cost savings to the government.

EM established the Consolidate Business Center (CBC) to consolidate and integrate business infrastructure support for selected EM sites. The support includes financial, logistics, information resources, human resources, contracting, legal services, and specialized technical expertise. EM implements performance management plans that focus resources on the work and eliminate functions as they become unnecessary, consolidates efforts as work volume decreases, maintains essential capability

as long as it is needed, and anticipates post-closure requirements. EM requires that sites identify business support functions that can be transferred to the CBC.

Consolidating such functions in one location is a more efficient way to handle the business and administrative activities of closure sites and sites where the workload and workforce is reducing. The CBC has 142 FTEs with seven being supervisory for a supervisory ratio of one supervisor for every 20 employees. This allows EM sites to focus their staff on the technical aspects of cleanup work. The CBC staffing level and grade structure fosters an experienced expert staff that leverages state-of-the-art technology to respond to onsite issues in an efficient hands-on manner. The individual sites would not be able to obtain the resources to establish or maintain this type of expertise in each functional area. The CBC also maintains an experienced Closure Cadre staff of technical experts who sign mobility agreements. This provides the CBC flexibility and efficiency in meeting onsite technical requirements. In December 2005, the CBC implemented the new Non-Supervisory Performance Management System throughout its serviced organizations. The system was developed in an electronic format that can efficiently be copied to the DOE electronic initiative to have a DOE-wide, web-based performance management system. The CBC processed approximately 483 awards since its establishment with an estimated average processing time of less than two days per action. The CBC developed and classified PDs for the EM corporate Contract Specialist positions. The CBC will fill approximately 20 contracting positions across the EM complex. These positions will be advertised on an "open-continuous" basis to address the hiring needs of the various EM field sites. The positions were posted in early February 2006, and selection certificates will be issued upon request. The current average time for processing recruitment actions at the CBC from receipt of the Request for Personnel Action, SF-52, in the Human Resources (HR) Office to selection of a candidate is approximately 90 days. This time includes the early growing pains in staffing the CBC. The fill times are steadily improving as the CBC works toward the OPM's 45-day model. Merit promotion certificates are being issued in a more timely manner and processes are constantly being analyzed to speed up the hiring process.

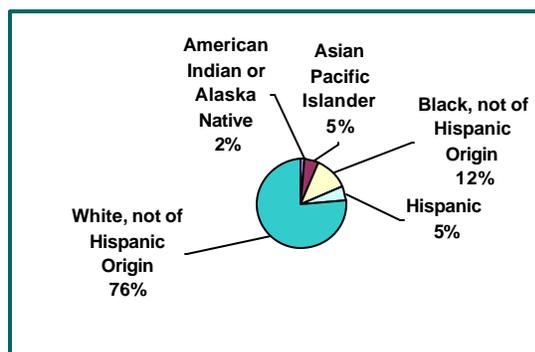
### Staff Augmentation

EM uses a variety of innovative ways to address its FTE staffing needs. We may fill positions for shorter periods using limited-term appointments to avoid subsequent personnel impact. EM makes significant efforts to fill skill gaps for short-term problem areas using in-house capability. Managers can request assistance from the CBC for short-term, quick turnaround projects/tasks with durations of about 90 days. If the requisite expertise is not available at the CBC, a broader EM complex-wide search is made and support provided. This concept will ultimately be broadened to include all disciplines, as required.

### Diversity

The diversity profile for EM is shown in Figure 3-2. At present, the minority makeup of EM is 24 percent. According to the civilian labor force statistics, which were derived from 2000 U.S. Census Data, the combined minority labor force is approximately 27 percent. Although these statistics suggest a comparatively good diversity picture for EM as a whole, a detailed analysis points to cultural and ethnic imbalances at individual sites where the representation for each minority group is below the local labor statistics for the area/region of the country in which the site operates.

Figure 3-2. EM Diversity Profile



EM is endeavoring to create a diversity strategy that identifies and addresses any cultural, ethnic, and gender disparities across the EM complex. We are committed to making an effort to locate, attract, and retain qualified minorities in the EM workforce. This will result in a competent and highly skilled workforce, representative of America's diversity, which enables EM to accomplish its mission. To accomplish this, EM will establish diversity programs, define

measures of their effectiveness, and monitor progress against established goals. EM will also evaluate leadership demographics and monitor change against established goals.

#### Milestones

- Collect and analyze demographic data. Identify areas for improvement and set future state goals for cultural representation. FY 2006 Q4
- Study existing minority recruitment programs at EM and DOE (e.g., Hispanic Recruitment and Intern Program) and select ones that can be adapted for use to meet EM needs. FY 2006 Q4
- Design EM-specific diversity programs linked to succession planning, recruitment, and retention programs. FY 2006 Q4

#### Succession Planning

EM will develop a formal succession plan that ensures continuity of leadership. The plan will identify key management and leadership positions. EM will also ensure that programs are in place to continually provide a pipeline of candidates for these key positions. In the past, most managers have been selected based on technical expertise rather than demonstrated leadership ability. Leadership development has not been given equal priority in the evaluation of executive performance. EM has committed a significant investment in developing leadership capability through training and mentoring. These programs are designed to result in the creation and/or expansion of a talent pool and will be continuously updated to ensure continuity of leadership and knowledge. EM has initiated and implemented training programs at all levels of the organization ranging from senior leadership to lower echelons. EM also utilizes a number of developmental programs (focused on the GS-5/7 level and continuing through mid-level managers) that will enable individuals to move up and succeed some of the aging workforce. For the purpose of enhancing and augmenting the new skills needed by the EM workforce, EM continues to commit significant funding for training of its employees. EM encourages training for fulfilling certification requirements, for building upon existing skills, and for acquiring new skills. EM will ensure that a systematic approach to filling in the leadership competency gaps is in place.

#### Milestones

- Identify key management and leadership positions for succession planning based on current and anticipated future mission needs. FY 2006 Q4
- Conduct site and HQ needs assessments to identify developmental requirements relating to key management and leadership positions. FY 2007 Q1
- Close a specific percentage of management and leadership competency gaps. TBD

#### Knowledge Management

We are committed to knowledge management (KM), both as an important component of the PMA and as an effective tool for advancing and maintaining the technical skill base of the organization. EM is actively participating in DOE efforts to develop appropriate policy and implementation structures. For example, EM participated with other DOE program offices in populating the DOE corporate KM portal by posting suitable material such as PowerPoint™ presentations on KM and KM pilot projects.

EM recognizes that KM can be more effective when tailored to an organization's specific needs. Accordingly, in addition to the participation in the DOE corporate efforts, we have created and tailored KM activities to suit our mission requirements. The most important aspect of EM's plans for knowledge management is its rigorous effort in expanding the knowledge and skills base of its leaders, managers, and employees at all levels through expanded training, qualification, and certification programs. EM has also initiated action to comply with the DOE corporate requirement to establish a Subject-Matter Expert Directory and has posted information regarding Federal Technical Competencies. EM is also using its own web portal as a knowledge management tool. The EM portal is a vital knowledge management tool in providing information to employees across the complex in a comprehensive fashion. The portal serves several key functions by presenting program strategies and policies, providing programmatic information, serving as a resource for detailed information on all aspects of safety, organizing items of current interest,

providing discussion on performance and accomplishments, reporting on details of corporate decisions, and searching a variety of newspapers and other resources for pertinent information. The portal also has website links through EM's Human Capital Directory to subject matter experts (SMEs) and to the FTCP.

Safety continues to be an important aspect of the EM accelerated cleanup, which requires rigor in the analyses of technical, management, and safety considerations. To keep our safety and other technical staff abreast with the latest technical, management, and safety developments, EM is supporting, on a continuing basis, a KM pilot project that will acquire and disseminate technical journals of interest to the EM cleanup program. EM is exploring the possibility of a dedicated "reading room" to house these journals and provide employees with reasonable accommodations for this purpose.

EM is also using the EM Closure Cadre as a tool for maintaining a specialized knowledge base that EM can utilize on an as needed basis across the EM complex. The Closure Cadre represents a pool of highly trained and experienced technical staff that are available to fill in specific skill gaps in closure activities.

### **Employee Involvement**

EM believes strongly that people are the key to program success. EM leadership and managers at all levels in EM are firmly committed to not only good communications with the employees but also active participation and involvement of employees in how the organization carries out its difficult mission. For example, we went to great lengths to involve our employees in the design of the HQ organization and allocation of mission and functions. We wanted to foster a sense of ownership and involvement, provide clarity of roles and responsibility, and enable better support of the activities in the field.

To be a high-performing organization, EM believes that authority and decision-making needs reside at the most appropriate level. The EM managers and technical staff are the most heavily involved in the issues and, therefore, are often best able to represent and move forward in resolving them. Therefore, EM will make every effort to delegate appropriate authority to the appropriate level. We recognize that low employee morale can have a detrimental effect on the operation of a high-performing and productive organization. EM is establishing mechanisms that would prevent the genesis of morale issues. Addressing organizational effectiveness, culture issues, and improving the content and nature of work are the areas of focus.

EM also believes that fostering a climate that encourages the free and open expression of employee concerns is essential to the safe and efficient accomplishment of the EM mission. EM encourages its employees to discuss concerns with their immediate supervisor or any level of management. In turn, EM managers are expected to respond respectfully to these concerns in a prompt and effective manner to ensure efficient operation of the programs in their jurisdiction. In cases where employees are unable to raise issues to management, or are uncomfortable in doing so, EM will provide an alternative mechanism to report concerns and have them evaluated and addressed independent of the normal problem-resolving process. EM has appointed an Employee Concerns Officer (ECO) at HQ, who will interface with the HQ employees on issues of concern to them. ECO will also provide guidance and assistance to similar officials at the field offices.

### **Milestones**

- Appoint HQ ECO.

Completed April 2006

### **Linking Performance Appraisal Plans and Awards to DOE Mission and Goals**

EM will establish an effective and fair performance management and appraisal system that links DOE, EM, and site mission and goals to leaders', managers', and employees' performance plans to reinforce accountability and drive performance. The system will also provide for performance measures, definitions, and examples that guide leaders in assessing employees' performance. The system will also allow distinction between high and low performance.

### **Milestones**

- Cascade all Senior Executive Service (SES) performance plans related to EM goals to all EM employees. FY 2007 Q1 and annually thereafter
- Develop mechanisms to distinguish between various levels of performance. FY 2006 Q4

## 4.0 Work Force Analysis

Demographic data in Table 4-1 and Appendix A will show EM has a highly educated and skilled workforce, with around 81 percent of employees at the GS-13 level and above. Like most other Federal agencies, EM faces the challenge of maintaining a diverse and competent workforce under the pressures of both downsizing and a rapidly aging workforce. We are working to reshape that workforce both through attrition and through attracting new talent, and by targeting under-represented groups in recruiting.

**Table 4-1. EM Work Force By Grade**

Site or Organization	15	14	13	12	11	10	09	08	07	06	05	04	02	01	Total
Headquarters	84	80	35	4	5	2	14	11	4	1	1				241
Carlsbad Field Office	7	16	9	1	1		1		1	3					39
Chicago	1	4	2							1					8
Consolidated Business Center	19	37	40	5	3		6		14		2	1		2	129
Idaho Operations Office	8	14	27	1			1			1	1	1			54
NNSA Service Ctr & Site Offices	2	23	23	8	1			1		3					62
Oak Ridge	6	33	35	3			1		3	3					84
Ohio Field Office	1	9	11	1			1	1	1	1					26
Portsmouth Paducah Project Office	4	11	9	1	3				2						30
Richland Operations Office	23	81	86	8	4	1	3	8	8	3			1		226
Office of River Protection	9	46	26	1			2	2							86
Savannah River Operations Office	24	68	140	38	5		12		9	11	2	5			314
<b>TOTAL</b>	<b>188</b>	<b>422</b>	<b>443</b>	<b>71</b>	<b>22</b>	<b>3</b>	<b>41</b>	<b>23</b>	<b>42</b>	<b>27</b>	<b>6</b>	<b>7</b>	<b>1</b>	<b>2</b>	<b>1298</b>

In addition to regular analyses for workforce planning such as the Federal Technical Competencies Panel (FTCP), EM has conducted a series of detailed studies to provide a comprehensive understanding of current and future skill gaps in three broad mission-critical areas: acquisition and contracting, project management, and technical disciplines central to the cleanup operation. Other areas in the studies include facility representation, financial and budget analysis, a variety of human resources functions, project control, and legal support. The skill gaps we have identified result from changes in mission, work scope and policy, as well as from demographic workforce trends.

### 4.1 ACQUISITION AND CONTRACTING

The recent workforce studies revealed a number of skill gaps and streamlining opportunities in the area of acquisition and contracting. In response, EM has established a new DAS/APM as part of the HQ reorganization. This office will establish EM procurement policies, procedures, and strategic plans; support and advise on major acquisition efforts; and coordinate and oversee implementation of Departmental and EM directives. The DAS/APM will also serve as the primary interface with the Office of Management and other DOE elements concerning procurement issues. The three offices under its jurisdiction – Procurement Planning, Contract and Project Execution, and Project Management Oversight – will provide comprehensive coverage of the entire range of the procurement cycle and facilitate integration of best practices throughout the EM complex.

An important component of this new approach is the Procurement Contracting Officer/Administering Contracting Officer (PCO/ACO) concept. The Office of Procurement Planning will function as a PCO to lead and manage all pre-award efforts. While initial efforts focus on strategic management of new procurements, the office will eventually manage all pre-award actions including Source Evaluation Boards. Site offices will perform the ACO function and manage procurements upon award, and EM will require all site managers to hold contracting warrants. The Office of Contract and Project Execution will assist the Field Offices during the post-award period with specialty issues such as pension and medical

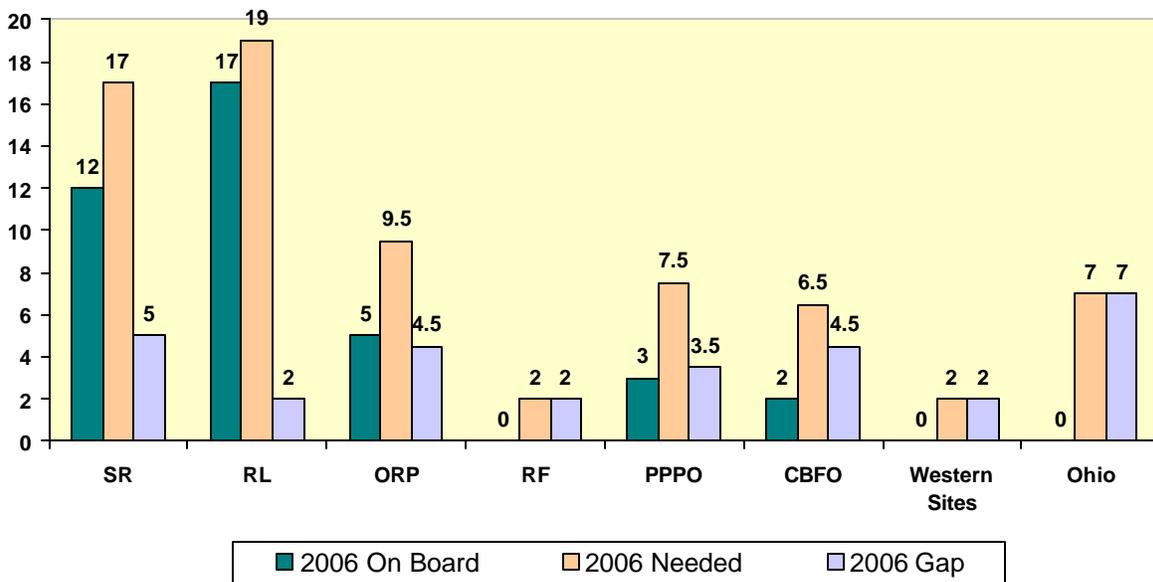
requirements The Office of Project Management Oversight will focus on performance in accordance with DOE's project management policies and practices.

Together, these offices will cover all necessary functions required to execute the PCO/ACO concept. They will craft policies, analyze successful and failed strategies, provide road maps for excellence to field organizations, facilitate and participate in source selection processes, and conduct project baseline and other program reviews and evaluations. Oversight of multiple operating contracts may require cross-training in construction contracting administration, cost reimbursement contracting incentives, formal source evaluation boards, contract awards, and cost-price analysis.

These organizational changes will enable EM to significantly transform the current pre-award process into an "acquisition machine," a business process that allows procurements to be treated as part of an ongoing system rather than as a series of unrelated individual activities. This process will vertically integrate procurement planning and project management leading to more effective management of contracts. A dramatically more efficient centralized EM HQ approach is a key element of the "acquisition machine" concept. EM has no contract specialists in HQ and currently has 59 contract specialists in the GS-1102 series in the field. The skill gaps analysis indicated an overall need for approximately 30 new contracting and procurement staff at varying levels of expertise (Figure 4-1) in two contracting paths, administrative and procurement planning and acquisition. In addition, specialized source selection, cost and price analysis, and pre-award contract specialists will be needed at EM HQ to staff the Procurement Planning Office. Multi-site job announcements have been issued to address this perceived deficit.

To implement this model, EM will use DAU standards and courses to fulfill mandatory education and certification requirements associated with the GS-1102, Contract Specialist job series. EM will also provide contract specialists at the GS-13/14 level who are certified at DAU Level III and who will be eligible to receive warrant authority in a short period of time. In addition, EM will also prepare junior personnel to develop and assume greater management responsibilities as they mature. This certification program is discussed at greater length in Section 5.3.

**Figure 4-1. Acquisition and Contracting Skills Gaps**



## 4.2 PROJECT MANAGEMENT

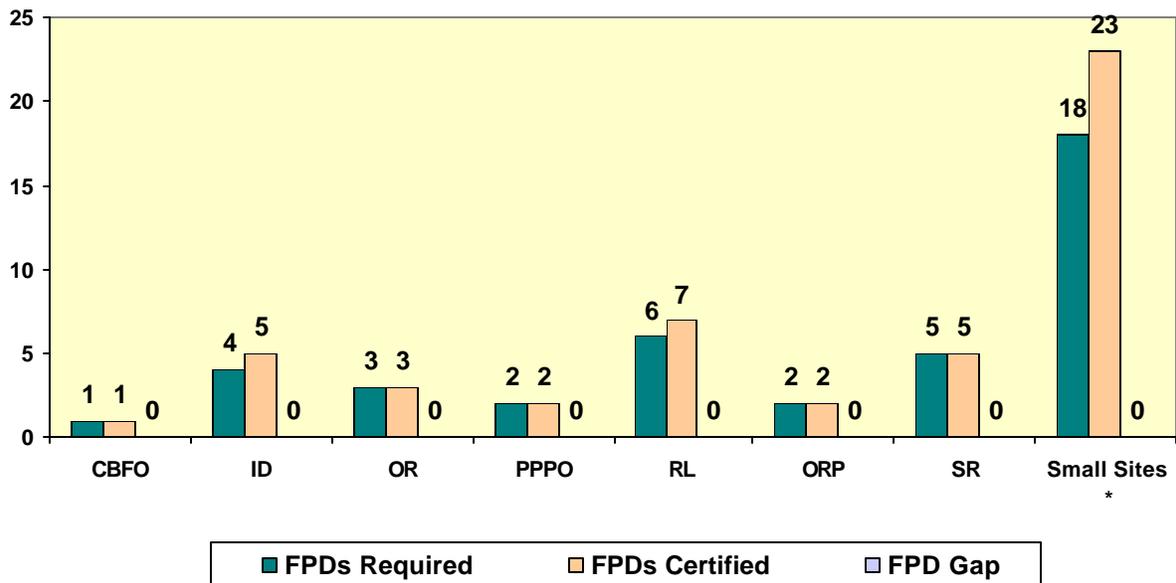
DOE Secretary Samuel Bodman noted in an August 10, 2005, memorandum for Heads of Departmental Elements titled Improving Project Management, "Successful Project Management is critical to DOE. Our ability to deliver projects, including information technology projects, within cost and schedule directly affects our credibility with the Administration, with the U.S. Congress and, most important, with the American people." He states that "DOE Order 413.3, Program and Project Management for the Acquisition of Capital Assets, and its accompanying manual are to be followed scrupulously, without exception." The memorandum outlines training, education, and experience requirements, incentivizing superior performance and accountability with regard to project management.

DOE Order 361.1A and implementing guidance lay out in detail four levels of certification (based on estimated project cost) along with required competencies, such as contract and acquisition management, project controls and configuration management, earned value management, and so forth. Additionally, specialized training and experience-based requirements are identified for each certification level.

A formal project management certification program has been established under DOE's PMCDP. A CRB formally certifies all candidates, with a deadline for DOE programs of certification of all FPDs managing line-item projects by May 2006. In addition, a new high-level initiative has been established at the Under Secretary level to improve and update the DOE Order and guidance to better reflect broadening of construction-oriented project management language to the diverse spectrum of EM cleanup projects.

An initial skill gap analysis of data from numerous FPD application packages indicates that, in general, EM Project Managers have excellent skills and knowledge in the requisite competency areas and that, for most projects, existing project management experience meets requirements. EM has identified a total of 86 projects as reportable to DOE's Office of Engineering and Construction Management and estimates over 60 FPDs will have obtained PMCDP certification over the next year, many at levels 3 and 4. In addition to the six Line Item certified FPDs required by DOE, EM set the goal of ensuring each active cleanup project had at least one incumbent Project Manager certified by the May 2006 deadline, which translates to an additional 35 certified FPDs. EM met the goal with 48 FPDs certified. The remaining FPDs are being certified, providing additional depth to EM's project management pool. To accomplish this, EM established an internal review team (IRT) and an internal panel, which is processing application packages for incumbent and nominated FPDs. Figure 4-2 provides the status of FPDs by site, who were certified by the May 2006 deadline.

Figure 4-2. Federal Project Directors



\* Included under Small Sites: Brookhaven, Moab, Ashtabula, Columbus, Fernald, Miamisburg, West Valley, Rocky Flats, ETEC, SPRU, Los Alamos, Kansas City, Pantex, Sandia, Nevada Test Site, Lawrence Livermore, and HQ.

As part of this skill gap assessment, EM participated in a data call to collect information on existing participants in the PMCDP program (both FPDs and other participants), including projections of attrition/retirements over the next 5 years. The data indicates, that while some adjustments will be necessary, future losses of qualified senior Project Managers, could be filled by existing junior Project Managers who are supporting Integrated Project Teams (IPTs),. This infill vision is plausible provided a robust training and mentoring program is maintained.

In summary, other than the near-term need to certify FPDs, the skill gaps analysis has not identified any other project management related competencies that present a significant issue for the cleanup program. Mentoring and accelerated training courses are being provided to EM project management staff to improve the rate of certifications. Once certifications are attained for managers of all existing projects, EM will begin filling the PMCDP pipeline with highly qualified and certified Project Managers to ensure for personnel transitions and succession planning. Through a combination of training, mentoring, and recruiting strategies, no shortfalls in project management are expected by September 30, 2006. EM will continue to monitor future needs for project management skills and take necessary actions, including certification and training to maintain an ongoing queue of expertise.

### 4.3 TECHNICAL DISCIPLINES

In response to the Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 93-3, *Improving DOE Technical Capability in Defense Nuclear Facilities Program*, DOE developed a formal qualification program for its technical employees who provide management oversight or technical guidance and whose actions or decisions could impact the safe operations of DOE defense nuclear facilities. This Technical Qualification Program (TQP) was formalized by DOE Order O 360.1 A, *Federal Employees Training*, and several DOE-wide Functional Area Qualifications Standards.

In March 1998, DOE revised its Implementation Plan (IP) for DNFSB Recommendation 93-3. The revised IP outlined the establishment of a FTCP and a panel of agents from DOE program and Operations/Field Offices.

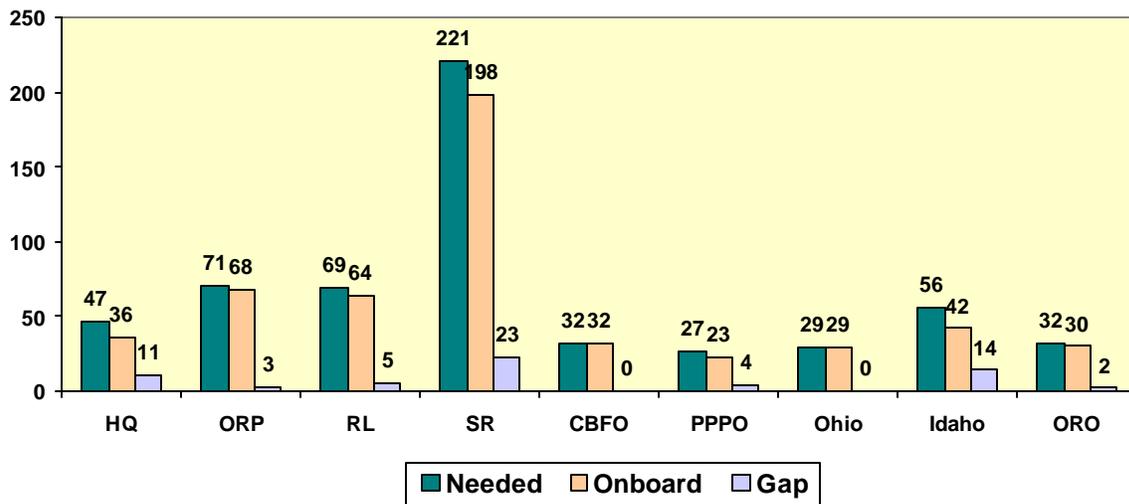
The DOE policy DOE P 426.1, *Federal Technical Capability Policy for Defense Nuclear Facilities*, spells out requirements for the recruitment, deployment, development, and retention of a workforce with the demonstrated technical capabilities to safely accomplish DOE's mission and responsibilities. Furthermore, DOE P 450.4, *Safety Management System Policy*, calls for the incorporation of Integrated Safety Management (ISM) principles. One of the ISM principles is *Competence Commensurate with Responsibilities*, which refers in part to specific competencies that individuals need to develop and maintain in order to discharge their responsibilities.

The DOE Manual DOE M 426.1, *Federal Technical Capability Manual*, requires that managers annually conduct a workforce analysis of their organizations and develop SPs that identify technical capabilities and positions to ensure safe operations at defense nuclear facilities. The panel provides the Deputy Secretary of Energy an annual report summarizing actions taken to address DOE's needs.

The skill gap analysis presented in Section 6.1 is based on information generated from the 2005 FTCP workforce analysis. The 2005 FTCP workforce analysis has been reviewed by the FTCP agents and prioritized into three distinct groups accelerated hiring, normal recruitment, and coverage by alternate means. EM has initiated action to resolve the identified skills gaps. EM targets the completion of filling high priority hiring by December 2006. Performance metrics in meeting the SPs will be reported quarterly by the FTCP Chair to the Deputy Secretary to ensure that all sites are adequately staffed.

Figure 4.3 depicts the skill gaps for different technical capabilities at EM and environmental cleanup programs managed by sites under other PSOs, such as Oak Ridge and Idaho. It does not include, however, the cleanup program managed by the National Nuclear Security Administration (NNSA).

**Figure 4-3. Federal Technical Capability Program Critical Skills**



#### 4.4 OTHER AREAS

In addition to the major areas listed above, EM also examined other areas. These areas are crucial to EM's mission and EM treats these areas with great attention, as any neglect of these areas has the potential to jeopardize the mission. These areas are broadly classified as information technology and support areas.

### Information Technologies

EM's skill development and certification needs also arise in the information technology (IT) management discipline. EM mission activities are supported by complex information technology solutions. The tactical planning, maintenance, and operation of these technology solutions require IT project management skills that play an important role in EM's workforce planning and skill development initiatives.

PMA recognizes the need for trained IT Project Managers within the Federal workforce. As a result, major IT investments must have a trained, certified Project Manager assigned prior to funding approval by the Office of Management and Budget (OMB). EM meets this requirement.

Looking forward, this OMB requirement creates a workforce planning challenge for EM. Workforce restructuring and normal attrition of IT-skilled staff within EM could negatively impact oversight of EM's IT systems and development projects. To address this challenge, EM is monitoring the effects of workforce restructuring and staff attrition on the management of IT support systems and IT development projects. An ongoing initiative is being established to identify and train candidate staff to serve as certified IT Project Managers. EM makes use of the certified Project Manager training curriculum provided by the DOE Office of Chief Information Officer organization. The certified Project Managers are assigned site-specific IT system management and system development project management responsibilities across EM. As this initiative matures, a "bench" staff of certified Project Managers is created, available to meet site-specific requirements.

### Support Areas

The key support areas include: financial analysts, budget, human resources, EEO complaints processing, diversity programs, dispute resolution, physical security, project management and project control, and legal services. There are no current site shortfalls in these areas, but each site is carefully looking at projected retirements in various offices to ensure no staffing issues emerge.

## 5.0 Employee Development

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EM is carrying out concerted efforts in training, qualifying, and certifying its existing workforce to enhance its competencies to meet the expectation of becoming a high-performing organization. Assistant Secretary James Rispoli believes firmly that every EM employee, including himself, should be continually trying to learn. Even seasoned executives with decades of experience need to refine their skills and stay current on new information in their field of expertise.

There are numerous “tools in the EM toolbox” to assist in that development.

- Technical training
- Certification programs
- Executive leadership training
- Diverse work assignments
- Formal education classes
- Case study workshops
- Mentoring/coaching
- 360 feedback analysis
- Employee development programs and managerial training



EM senior leadership has acknowledged the importance of the employee development programs and is committed to ensuring resources are allocated as necessary. A major outcome of EM senior leadership support of employee development is fostering a culture of continuous learning that encourages adoption, sharing, and institutionalizing of innovative ideas and practices.

The following sections discuss some of these employee development “tools.” Because of the major emphasis on safety, project management and contracting, the sections will explain some of the key qualification and certification programs, such as the following:

- Qualification Programs (Safety-Driven):
  - » Technical Qualifications Program (TQP)
  - » Senior Technical Safety Managers (STSMs)
  - » Nuclear Executive Leadership Training (NELT)
- Certification Programs:
  - » Project Management Career Development Program (PMCDP)
  - » Defense Acquisition University (DAU) certification for contracting staff

A number of training programs have also been established (or are under development) as discussed below:

- PMCDP training for non-designated FPDs (e.g., support staff)
- PMCDP training for program managers
- Executive and Leadership Development
- QA
- Cost Estimating
- Other Technical Training

## 5.1. SAFETY

Safety is a key consideration in all EM activities. An important safety related program is the TQP, which includes the STSM Program. Both of these safety programs as well as other safety-related training programs are discussed below:

### Technical Qualification Program

In response to the DNFSB Recommendation 93-3, *Improving DOE Technical Capability in Defense Nuclear Facilities Program*, DOE developed a formal qualification program for its technical employees who provide management oversight or technical guidance and whose actions or decisions could impact the safe operations of DOE defense nuclear facilities. This TQP was formalized by DOE M 426.1-1, *Federal Technical Capability Manual*. The FTCP oversees the TQP implementation and oversees or conducts periodic assessments for the effectiveness of the program. The DOE CAP for DNFSB Recommendation 2004-1 Commitment 13 includes an action to establish and implement a corporate accreditation process and plan for TQP based on the INPO model. This action is underway. EM plans to keep up-to-date with changes for the TQP program and implement when formally approved.

#### Milestones

- DOE to revise M-426.1-1 A December 2006
- EM implementation of M-426.1-1 A FY 2007 Q2

### Senior Technical Safety Managers

As part of DOE's response to the DNFSB Recommendation 93-3, the STSM Program was established for senior managers as part of the TQP.

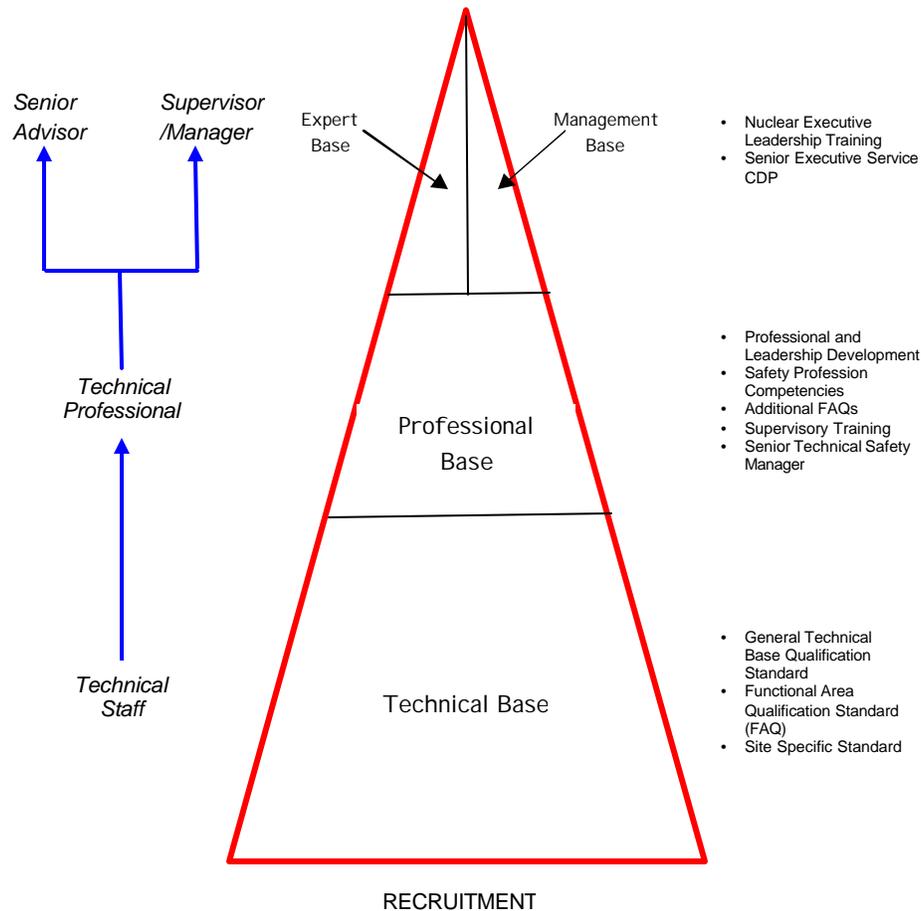
The Office of Facility Safety, EH-2, has the responsibility for drafting an updated STSM qualification standard under the auspices of the FTCP. A draft report on the Technical Professional Career Program, addresses the corrective action for DNFSB Recommendation 2004-1 on STSM. The draft report indicates that the FTCP has several initiatives underway to upgrade STSM training and qualifications. The National Training Center is developing a training program for STSM qualification.

In a letter to the DNFSB dated December 27, 2005, DOE outlined the process criteria and attributes for the delegation of safety responsibilities. EM followed up by including these process criteria in SOPP SP-5.15 dated February 27, 2006. The process criteria required that the delegation of authority shall only be made to individuals who possess the necessary qualifications, experience, and expertise. The minimum expectations for individual requirements include STSM qualification and the successful completion of a 1-week NELT.

#### Milestones

- EM to participate in first revised STSM training. Completed June 2006
- EM to develop a plan to implement new STSM training. December 2006
- EM to implement new STSM training. January 2007

**Figure 5-1. DOE Technical Professional Career Development Program**



### **Nuclear Executive Leadership Training**

Commitment 12 of DOE's IP dated December 23, 2004, in response to the DNFSB Recommendation 2004-1, *Oversight of Complex, High-Hazard Nuclear Operations*, calls for structured training for safety professionals, senior managers, and decision-makers responsible for nuclear safety and nuclear safety oversight. DOE established the NELT for managers and deputy managers from the Operations/Field Offices and DASs from DOE and NNSA HQ. The course participants are selected by their respective Assistant Secretary or NNSA Principal Deputy Administrator.

The objective of the NELT is to provide structured supplemental training to senior personnel to improve their capability to fulfill safety and leadership responsibilities. The training is offered in-residence over a 5-day period. The NELT involves 9 training modules and includes testing to verify comprehension of the material. It covers issues such as management of technical personnel, problem solving and decision-making. The NELT was offered on May 19-13, 2005, and September 19-23, 2005. The Office of Environment, Safety and Health (EH), EM, and NNSA will continue to sponsor the NELT.

### **Milestones**

- 5-day training course
- 2-day refresher course

August 2006  
TBD

## 5.2. PROJECT/PROGRAM MANAGEMENT

### Project Management Career Development Program Certification

As discussed earlier in the skill gap assessment section, EM is currently supporting the certification of incumbent FPDs. This is done through application package quality control, review/coordination, supporting candidate interviews and CRB meetings. All incumbent line item FPDs were certified by the CRB by the target date of May 31, 2006. EM also obtained certification of at least one incumbent and responsible project director for all active cleanup projects by the May deadline. Re-certification of all incumbent FPDs at higher levels will be accomplished as necessary to meet requirements (schedule is candidate dependent).



*“Building leaders with good judgment is key to our organization...Being a project manager and being a leader are inseparable when you are responsible for very large, complex projects.”*

*Jim Rispoli  
PM Network  
December 2005*

#### Milestones

- |  |                    |
|--|--------------------|
| ➤ Certify all Line Item FPDs.  | Completed May 2006 |
| ➤ Have in place at least one certified FPD for all Cleanup Projects. | Completed May 2006 |
| ➤ Certify all other assigned FPDs.                                   | December 2006      |

### Project Management Career Development Program Training and Pipeline Development

In support of ongoing training and certification of designated FPDs, EM has funded several series of PMCDP courses (Levels 1 and 2) dedicated to EM employees. A Level 1 series was completed at HQ in December 2005 and another Level 1 series, was recently completed at Field Offices as well. A Level 2 series is underway with more course offerings being considered. EM will also continue to assess the FPD “pipeline” in order to properly plan for attrition and succession.

#### Milestones

##### Hold EM PMCDP Level 1 Courses

- |  |                      |
|--|----------------------|
| ➤ Acquisition Strategy and Planning (ID)                       | Completed Feb 2006   |
| ➤ Planning for Performance-Based Management Contracting (PPPO) | Completed Feb 2006   |
| ➤ Contract Administration for Technical Representatives (CBC)  | Completed March 2006 |
| ➤ Earned Value Management Systems & Project Reporting (OR)     | Completed March 2006 |
| ➤ Project Management Systems and Practices in DOE (RL)         | Completed May 2006   |

##### Hold EM PMCDP Level 2 Courses

- |  |                       |
|--|-----------------------|
| ➤ Leadership/Supervision (ID)                  | Completed March 2006  |
| ➤ Project Risk Analysis and Management (SR)    | Completed March 2006  |
| ➤ Project Management Simulation (RL)           | Rescheduled July 2006 |
| ➤ Advanced Concepts in Project Management (SR) | Completed May 2006    |

## 5.3. CONTRACTING

### Contracting Staff Certification

DOE certifies its contracting staff against the standards of the DAU. The DAU includes mandatory and desired standards that are taught directly at various sites located on or near Department of Defense (DOD) facilities and has 13 career paths related to the procurement process. The course work is progressive and sequential, building upon previously learned skills. Certification is based on education, experience, and training. The minimal education required for all three certification levels is a baccalaureate degree, including 24 semester hours in disciplines such as accounting, law, business, finance, contracts, and purchasing. Minimal contracting experience requirements are 1 year at Level I, 2 years at Level II, and 4 years at Level III.

Level I certification requires completion of five specific courses and one elective, which can be obtained on-line. Level II requires five courses, two of which can be electives taught offsite/online. Level III has three courses, two of which are elective. Additionally, it is desired that applicants for certification at Level III complete 2 weeks of management leadership training.

There are currently 59 EM contract specialists in the GS-1102 series. Forty-five of them are rated at Level III, or 75 percent of the total. Eight are now certified at Level II, and one at Level I. The remaining 6 to 10 percent of the total have not achieved certification status. The non-certified employees include those who entered the procurement field prior to the baccalaureate educational requirement or those who recently began their careers. There is concern that only 9 employees are being developed at the lower certification levels. EM has issued job announcements for multiple positions at GS-7 through GS-13 in the GS-1102 series that may be located at any of the EM sites. Fifty percent or more of those selected are anticipated to be working upward from the Level I or Level II certification levels. They will provide EM with more depth, and serve as a succession pool for positions held by those nearing retirement.

EM does not have a Headquarters (HQ) directed training and certification program. The training and certification is the responsibility of the field contracting offices. EM is planning to monitor the training and certification activities of the Field Offices covering both existing contracting staff and new recruits.

### Milestones

- Project Management Career Development Program (PMCDP) training course "Contract Administration for Technical Representatives" (CBC) Completed March 2006
- Issue multi-position hiring announcement to recruit up to 13 contracting specialists (GS-1102 series). Posted with continuous open application period for 2006. Completed February 2006
- Office of River Protection (ORP) creating and staffing a new Contract Administration Organization. September 2006

## 5.4. COST ESTIMATING

EM currently has 1 certified cost analyst on staff and approximately 12 employees who have participated on Source Evaluation Boards and have had some estimating experience. The workforce analysis recognizes that cost estimating expertise is critically short in the EM workforce. EM is planning to provide professional training to existing staff from HQ and auxiliary sites. Initial training will provide approximately 50 employees with basic and intermediate cost estimating/cost analysis training. Following that, approximately 6-8 employees will be selected to continue their development toward a professional certification. The basic training session is being scheduled and will be provided by the Association for the Advancement of Cost Engineers International (AACEI). No new hires are anticipated. EM is planning three workshops in FY 2006 on cost estimation.

### Milestones

- Germantown cost estimating workshop Completed February 2006
- Savannah River cost estimating workshop Completed March 2006
- Richland cost estimating workshop Completed April 2006
- Develop a lessons learned summit for an interactive workshop FY 2006 Q4
- Conduct Remedial Action Cost Engineering and Requirements system training. Offer three courses, 2 days each. FY 2006 Q3
- Update existing intermediate level cost estimating manual and develop a training module for cost estimating and cost validation for environmental remediation projects. FY 2006 Q3
- Certify 6-8 Federal employees as future AACEI certified Cost Estimators. Beginning FY 2007

## **5.5. MANAGEMENT**

EM is leveraging a wide range of programs that are focused on improving management and leadership. These programs not only help in improving existing management excellence but also help train and foster new and emerging leaders

### Executive Excellence

In an effort to expand its corporate executive development base, EM, partnering with the DAU, is conducting specific training for its senior managers to become well-versed on issues and problems as they relate to project management. A major objective will be to provide EM executives with the skills to assess real world information and make major project management decisions including, but not limited to, Critical Decisions, baseline acceptance, and approval/rejection of contractor requests for equitable adjustment.

EM's AAPMP Program will be conducted in three phases. The first phase is a 4-day workshop providing an in-depth perspective of selected EM programmatic or acquisition events and their impact on the EM cleanup mission, with a focus on where project management has broken down. The peer review process will highlight corporate policies, practices, expectations, and culture that caused or allowed the events to occur. The second phase is a joint 4-day long DOE-DOD Forum that focuses on case studies from a much broader Federal government acquisition perspective and involves executives from EM and other agencies. Targeted technical competencies will be strategically selected to provide the executives with a planned profile of programmatic and acquisition related principles. The third and final phase will be a 2-week workshop focused on providing individual executives with the perspective of acquisition and project management held by other DOE elements, as well as other government agencies. It will involve an assignment to EM HQ providing close, daily contact with the Assistant Secretary and other Departmental organizations.

Initially the three-phased program will be for incumbent EM executives, after which the program will become a recurring workshop to be part of professional enrichment for executives at SES level. Future executives will be eligible to enter the AAPMP Program upon selection as SES. Additionally, other entrants may be approved upon consideration of their assignments in equivalent positions, for example, at smaller sites.

### Milestones

- |                       |            |
|-----------------------|------------|
| ➤ AAPMP Phase 1       | March 2006 |
| ➤ AAPMP Phase 2 and 3 | May 2006   |
| ➤ AAPMP Phase 3       | TBD        |

### Leadership Development for Senior Executives

EM continues to implement its EDP, which provides concentrated assistance for selected EM senior executives through a combined focus on management and leadership competencies and developmental activities. It is designed to provide a well-balanced approach to development and enhancement of leadership skills of EM senior managers. It consists of formal course work, periodic seminars, team projects, periodic action learning sessions, and mentoring/coaching programs. There are six management vacancies in the new EM HQ organization. This could possibly require EDP training for a new group of executives this year.

### Federal Executive Institute Program

EM is also supporting its executives and high-potential employees to attend the Federal Executive Institute's (FEI) Leadership in Democratic Society (LDS) Program. This 4-week program brings together managers and executives from 25 to 30 domestic and defense agencies for a unique, residential learning experience. The themes of FEI's LDS Program reflect and enhance the common culture of senior Federal executives. Personal leadership, organizational transformation, policy, and global perspective components support an overarching emphasis on our government's constitutional framework. The objective is to help agencies in the development of their career executive corps, linking individual development to improved agency performance. Benefits reported by graduates of FEI's LDS Program include:

- Keen insights into their leadership strengths and areas for development
- Improved leadership and management skills, especially in such areas as team building, influencing/negotiating, strategic thinking, political savvy, and external awareness
- Improved organizational performance as a result of what was learned and later applied back on the job
- Dramatically larger networks for enhanced problem solving
- Increased appreciation for the importance of Federal service and increased understanding of the diverse talents of Federal executives
- Broader understanding of the Constitution, the policy framework in which executives must lead, and the interplay among major stakeholders at the national level
- Improved personal wellness and balance in one's life

The LDS program is for members of the SES and GS-15s (or equivalent in other pay systems). Selected senior State, local, and international governmental executives also participate. In the recent past, EM has strongly encouraged participation in this program. Four EM employees attended this month-long course in 2005. EM is planning to send 2 to 4 employees every year beginning in FY 2007.

### Leadership Development for Non-supervisory Staff

EM is also developing a complex-wide leadership development program for non-supervisory employees for implementation later this year. The Savannah River Operations Office (SR) is currently implementing a year-long supervisory development pilot program to include three non-supervisory employees at the GS-14 level. All SR SES employees and the three non-supervisory employees in the pilot program have attended a U.S. Department of Agriculture (USDA) Graduate School course on Performance and Conduct Issues in the Workplace. In the second quarter of FY 2006, SR will be conducting an OPM Leadership 360 assessment on 30 managers and supervisors and the three non-supervisory employees in the pilot program. This assessment will provide feedback on 27 OPM Executive Core Competencies and identify individual strengths and developmental needs. A site baseline will be developed from these assessments conducted as part of the 2004 Leadership and Organizational Assessment and compared against the

results from the new assessments being conducted this spring. This pilot program will be implemented EM complex-wide if deemed successful.

### **Career Development Programs**

EM is also encouraging participation in a number of training programs for various levels of employees ranging from GS-5 through GS-15. These programs are described below:

#### **Aspiring Leaders Program**

EM is currently soliciting employee interest in the following FY 2006/FY 2007 career development programs offered by the USDA Graduate School Leadership Development Academy and coordinated by the Office of Human Capital Management. The Aspiring Leader Program, a 6-month long program, is designed for full-time Federal employees at the GS-5 through GS-7 (administrative assistants) or equivalent level, who have potential leadership qualities and abilities. The program provides training in areas such as leadership, problem solving, interpersonal skills, oral and written communication, and technical competence.

#### **New Leader Program**

The New Leader Program is designed for full-time federal employees at the GS-7 through GS-11 level (administrative assistants, technicians, support scientist). The program provides leadership skill competency training and exploration over a period of 6 months.

#### **Executive Leadership Program**

The Executive Leadership Program targets employees at the GS-11 through GS-13 level. The target audiences are scientists, managers, team leaders, and project leaders. The program provides employees with limited or no supervisory experience, new skills, based on OPM's leadership competencies. The program's duration is for 12 months, which include 5 residential training weeks, 30-60 day developmental assignments, interviews/book reviews, benchmarking, and best practice projects. All participants are provided formal training, shadowing assignments, mentoring/coaching, and are required to develop an individual leadership plan.

#### **Executive Potential Program**

The Executive Potential Program is a 12-month training/developmental assignment that focuses on OPM's core leadership competencies. Target audiences include scientists, managers, and supervisors at the GS-13 through GS-15 or equivalent level. The program is designed to develop high-level employees through assignments that will equip him/her to take on greater job responsibilities. The program includes 4 residential training weeks, 360 assessment feedback, two 60-day developmental assignments, benchmarking/best practices, and participation on experiential learning teams. All participants are provided formal training, shadowing assignments, mentoring/coaching, and are required to develop an individual leadership plan.

#### **EM Quality Assurance Program Plan Specialized Training**

The November 23, 2005, EM HQ QAPP requires EM HQ managers and selected technical positions to receive specialized training of approximately 4 hours total class time in the following areas: (1) Integrated Safety Management (ISM)/2004-1; (2) Management Expectations; (3) Roles, Responsibilities (in the Functions, Responsibilities and Authorities), and Interfaces; and (4) EM HQ QAPP Requirements and Implementation.

The Assistant Secretary, Executive Officer, Principal DAS, Chief Operating Officer, all DASs, all Office Directors, EM Lessons Learned Coordinator, EM Corrective Action Management Program Point-of-Contact, all EM Safety Analysts, and any EM HQ QA personnel are required to attend the training. The EM HQ program offices are also providing the EM QA Administrator with lists of other individuals that will need the training. The QA Administrator is developing a training schedule that will be announced by August 2006.

All EM HQ Federal employees are required to take a general training on QA and on our EM HQ QAPP. It is an online training and is available now. All employees are required to complete this training by December 31, 2006.

## 5.6. TECHNICAL

There are numerous technical training classes available both inside and outside DOE on the key technical disciplines related to EM work, including but not limited to:

- Hydrology
- Geology
- Soil and Groundwater Remediation
- D&D
- Waste Packaging and Transportation
- Fire Protection
- Nuclear Criticality
- Chemistry
- Environmental Monitoring

One area that is critical to many of the important EM decisions involves the ability to assess the performance of proposed remedies in terms of impact on the environment. This area, commonly referred to as Performance Assessment, is extremely complex and technically challenging. In light of this, EM is providing specific training on this as discussed below.

### Performance Assessment Training

The Office of Environmental Cleanup and Acceleration (EM-20) sponsored a 2-day training course on performance assessment on February 21-22, 2006. The course was open to DOE employees and contractors and was designed to provide managers, program managers, and other staff with an in-depth intensive understanding of the fundamentals of performance assessment theory, methodology, and approaches as related to low-level waste disposal facilities and/or tank closures under DOE M 435.1-1 and Section 3116 of the National Defense Authorization Act of 2006.

## 5.7. TECHNICAL AND PROFESSIONAL SOCIETIES

As an organization addressing some of the most technical challenges in the Federal government, EM is committed to encourage active participation of its employees in technical and professional societies. This will benefit EM as employees will be current on advances in their technical fields, and will have the opportunity for information exchange with peers in their fields through various technical and professional forums.

## 6.0 Skills Acquisition

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Over the next 5 years, EM will be faced with some momentous human capital challenges. EM will experience significant staff reductions as a result of site closures, diminishing work scopes, and retirements. As site closures approach, skilled and experienced workers may be inclined to find other employment, and the younger portion of the EM workforce that represents the future of the organization may attrite for employment opportunities with greater longevity. However, what will mostly threaten the preparedness of the EM workforce is the rate in which employees become eligible to retire. At present, excluding the CBC, 14 percent of the EM workforce is eligible for full retirement. Between 2006 and 2010, approximately 36 percent of the current onboard count of the EM workforce will be eligible for retirement. Combined full and early retirement eligible represents about 72 percent of the EM workforce. Strikingly, between 2006 and 2010, an additional 307 will join the ranks of early retirement eligible, which represents a combined total of full and early retirement eligible at approximately 94 percent of the current onboard staff. This potential loss of critical skills and institutional knowledge does not take into account the losses that will occur as a result of vacated positions for reasons other than retirement. Therefore, it is critically important and absolutely imperative that EM make every effort to locate, attract, and retain a qualified and career-oriented workforce to carry out the EM mission.

EM also faces the challenge of competing with other Federal agencies, such as the National Aeronautics and Space Administration, the Nuclear Regulatory Commission, and the private sector for a small pool of engineers and scientists coming out of the nation's universities. In particular, the resurgent interest in nuclear power will create even more competition in the coming years for graduates from nuclear engineer programs.

EM has a multi-pronged approach to addressing these challenges in short- and long-term. EM will acquire new talent through hiring experienced personnel to fill immediate needs. For example, EM is vigorously engaged in acquiring new talent to fill immediate mission-critical needs in the acquisition and contracting. To address the long-term problem of talent, EM is embarked upon aggressive programs to bring in a fresh pool of talent and to train them such that a pipeline to the future is maintained.

### 6.1. NEW EMPLOYEES

EM is currently engaged in several activities to bring in fresh, experienced talent in mission-critical areas. These activities are described below.

#### Contract Specialists Focused Hiring

There is an estimated need for approximately 20 new Contract Specialist, GS-1102, positions at various locations across the EM complex to manage the expected increased workload associated with the single project contract acquisition approach envisioned by the Assistant Secretary. On January 6, 2006, EM management approved a request that could recruit up to 20 additional contracting specialists. It is the first EM announcement where applicants would be considered for positions in any of the EM sites with GS-1102 vacancies. The EM CBC has been authorized to coordinate this corporate recruitment effort. These announcements have continuous open application periods for all of 2006. This focused approach will lead to reduction in hiring time and help address the skill gaps in an expeditious way.

The recruitment team is conducting an aggressive strategy for publicizing this activity. There have been numerous contacts made with the DAU, DOD transition offices, and professional organizations. The team is also advertising the announcements in online recruitment sites that specialize in Federal acquisition management, as well as on Federal job sites.

EM managers are authorized to use recruitment incentives for these jobs on a case-by-case basis. These would include relocation bonuses for current Federal employees and recruitment bonuses for new hires.

### Experienced Safety Personnel

The FTCP workforce and gap analysis for the year ending December 31, 2005 has been completed and is incorporated in this plan. The FTCP 2005 data indicates about 9 experienced safety technical professionals are needed at HQ on a high-priority basis to participate in safety oversight and assessments at field locations. Temporary assignments, details, and support contractors are to be used for other specialties but are not feasible in these nine areas because of the sustained workload. The process to recruit experienced safety professionals to meet safety oversight requirements at HQ was initiated after implementation of the HQ reorganization.

Some skill gaps are also identified by the ORP 2005 analysis; however, no high-priority requests were identified. ORP 2005 data further shows that 5 positions for FPDs to have been posted, with 2 selected. The 3 other ORP FPD positions require HQ approval. The ORP analysis expresses a concern that over 50 percent of its staff is eligible for retirement within the next 10 years.

The SRS analysis identified 13 gaps, on a high-priority basis. Some of these skill gaps are expected to be filled through matrix or CBC assignments, or purchasing the service, and 6 are expected to be filled by entry level applicants or interns. The SRS skill gaps include nuclear criticality, nuclear safety, industrial hygiene, construction management and engineering, field representatives, and fire protection. The SRS report also indicates that 2 STSMs are being recruited in SES positions.

The RL analysis identified 5 gaps on a high-priority basis. The high-priority positions include 1 fire protection engineer, 1 National Environmental Policy Act analyst, 1 FPD, and 2 security personnel. These positions have been posted. The RL projects increased the need for facility representative/authorization basis/safety system oversight (SSO) and technical staff in the immediate future. One facility representative was indicated as needed on a medium priority basis depending on budget and contractor's activity.

The Carlsbad Field Office (CBFO) report identified no skill gaps and indicated that increased workload created with preparation for receiving remote-handled TRU waste could be absorbed by current staff.

The Ohio report shows no gaps on a high-priority basis, however, it includes 1 STSM on a medium priority basis. As the Ohio sites are being closed in 2006, there is a temporary surplus in several technical skills at closure sites. Every effort is being made to transfer the technical staff to the CBC where they can support other sites.

The Portsmouth/Paducah Project Office (PPPO) report shows 4 gaps on a high-priority basis including STSM, SSO, nuclear safety, and safeguard and security. The report indicated possible use of matrixing to fill some of the gaps.

Oak Ridge, a non-EM site, reported no gaps on a high-priority basis for its cleanup program, however, 2 SSO were indicated on a medium basis. Also, 2 STSMs are being filled. At Oak Ridge, the EM program relies on the Operations Office for support in 12 technical specialty disciplines. Since the Operations Office has gaps in several of these disciplines, the shortage inevitably impacts EM; however, the FTE gaps for EM could not be determined.

Idaho, a non-EM site, reported 9 gaps on a high-priority basis for its cleanup program. The Idaho gaps include 4 facility representatives, 1 fire protection, 2 mechanical systems, and 2 nuclear safety. As indicated earlier, the EM FTCP report does not include cleanup needs managed by NNSA.

As of the end of July, nearly 40% of the gaps have been filled throughout EM.

### Milestones

- Initiate recruitment program for experienced safety professionals to meet safety oversight requirements at HQ

May 2006

### Closure Cadre

EM has used an innovative idea to acquire and maintain a pool of highly experienced individuals in closure activities. As EM continues to make progress in its efforts of accelerated cleanup and closure, the workforce requirements at its closure sites are being significantly reduced. Concurrently, EM faces the continuing challenge of maintaining in-house expertise in site closure activities that can be used across the complex when needed. The formation of the Closure Cadre, housed in the CBC, led to a win-win situation for employees at closure sites who were facing a potential loss of jobs and to EM, which was facing the loss of highly experienced individuals. EM implemented the concept of the Closure Cadre, which consists of individuals with extensive experience and expertise in closure management. Several Closure Cadre employees are now being deployed on assignments to different sites. Other members of the Closure Cadre are being assigned to HQ and being stationed where they can be deployed rapidly to respond to safety-related incidents at EM field sites, or to efficiently assist in performing assessments and other oversight functions. They provide a unique knowledge of field operations because of their onsite experience, which effectively supplements HQ expertise.

## **6.2. INTERN PROGRAMS**

There are a number of existing DOE intern programs, which EM will use as needed to acquire young talent. In addition, EM is setting up its own intern program focused on EM needs. The EM corporate career intern program will foster the development of future leaders, critical technical competencies and support functions that will face unprecedented challenges. While EM is in the process of establishing its own intern program, it will utilize existing Departmental intern programs to recruit and hire interns. Interns will be targeted to fill positions in areas where there is a clear current and future need. Both the Departmental and EM's programs are described below.

### Energy Student Achievement Program

EM is exploring the possibility of using DOE's Energy Student Achievement Program (ESAP). It is designed to provide undergraduate and graduate students in science, engineering, finance, law, IT, and other technical backgrounds with a unique opportunity to work alongside leading scientists, engineers, and top professionals at DOE. The Program includes developmental workshops to help participants transition from the college environment and begin their journey toward becoming "Well Rounded Leaders of the Future." Appointments are for a 10-week period during the summer months or can be made year round depending on program office needs. Placements can be made at HQ and/or at EM field locations.

Recruitment for ESAP is primarily handled by the Oak Ridge Institute of Science and Education (ORISE). ORISE has been found by DOE to be the most cost efficient and is effective for administering intern programs. In addition, ORISE has an outstanding record for recruiting a diverse pool of applicants. Universities targeted for the first class of interns will be Catholic University, where students have experience and exposure to an on campus Vitreous State Laboratory, and Florida International University, who are ranked among the top universities in the country for their engineering program.

### DOE Career Intern Program

The Career Intern Program (CIP) maximizes the use of hiring authorities and pay flexibilities to attract and retain highly qualified, diverse technical and professional personnel. This 2-year excepted service hiring authority, designed for use with entry-level developmental programs, provides maximum flexibility in recruitment strategy design, targeted recruitment, ease of hiring, and conversion to permanent appointment after completion of program requirements. It provides work and developmental training experiences that show a broad overview of the breadth, complexity, and importance of DOE's and EM's mission. To address specific deficiencies in the safety and other technical areas and contracting areas, the CIP can be utilized to hire experienced personnel. A career intern program, unlike a summer intern program, is generally used to attract recent college graduates. EM plans to attract, hire, and develop young talent to create a pool of future senior technical people and leaders. EM's immediate plans are to hire five technical interns in safety and other technical areas. In order to develop technical expertise in a specialty, it is essential that recent graduates work under the supervision and mentoring of a specialist in the same field. Some sites lack depth with specialists being limited to one-of-a-kind, if any. This will

require that intern programs for SMEs be concentrated at a few large sites, such as SRS. The annual technical SP for SRS includes plans to add up to 5 interns in specialty fields. EM will collaborate with HR in its recruitment efforts. HR will accompany SMEs in EM who can speak to prospective interns at college sponsored career fairs. The initial recruitment effort for this program should commence in the fall of 2006. Through the CIP, interns are typically hired at the GS-5 through GS-9 pay levels. EM may consider hiring at the graduate level at the GS-9 through GS-11 pay levels to attract more qualified candidates. Interns will be on career ladder appointments up to the GS-13 level. Promotions are based on the intern's successful completion of required phases of the program, but no sooner than 1 year at the previous grade.

#### **Milestones**

- Hire summer interns Summer 2006
- Recruit 5-10 interns under this program Fall 2006

#### **EM Career Intern Program**

The EM Career Intern Program (CIP) is being designed to provide a continuing source of highly competent technical personnel with the skills and knowledge to meet EM's current and future technical staffing needs, while also nurturing their potential as future leaders and managers within DOE. The EM CIP will attract college graduates (entry level at GS-7-11). Participants will maintain FTE status during the graduate study phase of the EM CIP.

The EM CIP will consist of general and specific technical training activities and rotational work experiences in a variety of functional programs and program support areas at various HQ and Field Offices. Participants will undergo a structured regimen of training and development for a minimum of 2 years before being assigned to his/her permanent duty station. After the first 2 years of training, 1 year of graduate-level study may be available to EM CIP participants for study in a technical specialty area that is tailored to meet the technological demands of the participants assigned a permanent duty station. To ensure that participants are properly trained and educated to carry out the duties related to his/her permanent work assignment/site, development will be consistent with the objectives and standards set by the TQP.

- Establish EM CIP September 2006

# ***APPENDICES***

## Appendix A Demographics

As the demographic data below shows, EM has a highly-educated, highly-skilled workforce. More than 80 percent of the employees hold positions at the GS-13 level and above. EM's challenge of maintaining a well-qualified, diverse, and competent workforce, while in a down-sizing mode, is heightened by the fact that EM, as in most Federal agencies, has a rapidly aging workforce. EM is encouraging staff attrition and reshaping the workforce to create a workplace that attracts new talent with a focus on recruiting from sources that include under-represented groups.

Figure A-1 shows how EM's current workforce is deployed complex-wide as of July 22, 2006.

**Figure A-1. EM Workforce by Site**

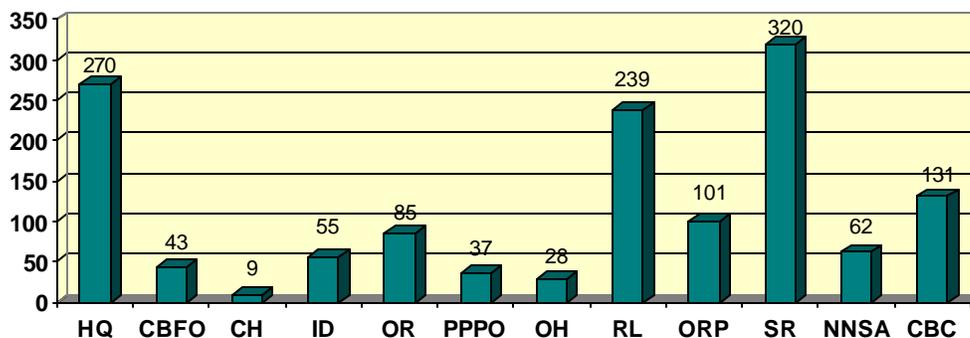


Table A-1 provides approved and projected FTE ceiling requirements by site through FY 2008.

**Table A-1. EM FTEs FY 2006 – FY 2008**

Site	FY 2006 Appropriation	FY 2007 Request	FY 2008 Projection
Carlsbad	50	50	50
Chicago	11	5	5
Idaho	67	67	67
Oak Ridge	85	83	83
Portsmouth/Paducah	44	45	45
Ohio	36	22	22
Richland	245	260	249
River Protection	110	115	115
Rocky Flats	5	0	0
Savannah River	348	345	345
NNSA Service Ctr. & Site Offices	75	75	75
<b>Subtotal Field FTEs</b>	<b>1,076</b>	<b>1,067</b>	<b>1,056</b>
<b>Headquarters</b>			
Washington, D.C.	290	293	293
Consolidated Business Ctr.	142	150	150
<b>Total EM FTEs</b>	<b>1,508</b>	<b>1,495</b>	<b>1,495</b>

## Appendix A Demographics

Figure A-2 shows the breakdown of EM employees by grade, with 82 percent of employees at GS-13 and above (including SES) as of July 22, 2006.

**Figure A-2. EM Employees by Grade**

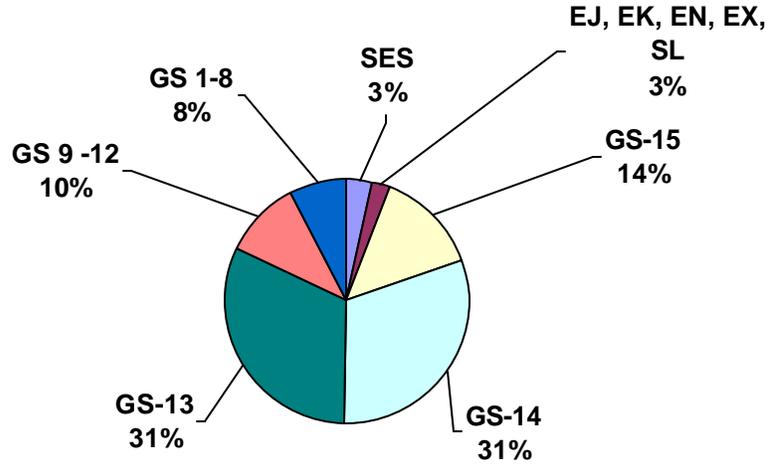
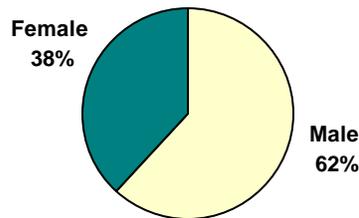


Figure A-3 shows the EM workforce, as of July 22, 2006, is 62 percent male and 38 percent female, as compared to 55 percent male and 45 percent female government-wide

**Figure A-3. EM Employees by Gender**



## Appendix A Demographics

The workforce at EM, as in most agencies in the Federal government, is aging. Figure A-4 shows EM's average age as of July 22, 2006, is 50.2 years and the average length of Federal service is 20.4 years. This compares to a government-wide average age of 46.7 and an average length of Federal service of 16.8 years.

**Figure A-4. EM Employees by Age**

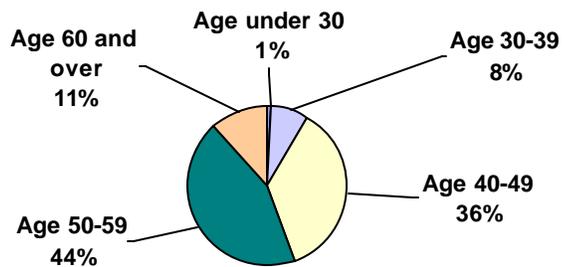
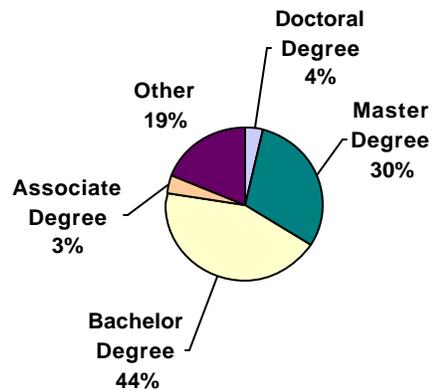


Figure A-5 shows that the EM workforce as of July 22, 2006 is highly educated, with 78 percent having a bachelor degree or higher, as compared to 41 percent government-wide.

**Figure A-5. EM Employees by Education Level**

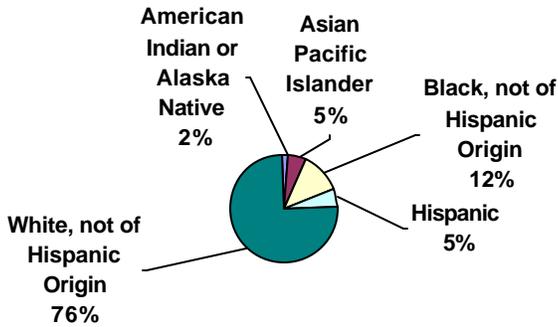


## Appendix A Demographics

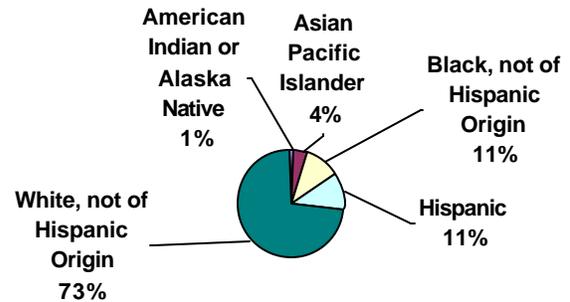
As of July 22 2006, 24 percent of EM's workforce is minorities. According to the civilian labor force statistics, which were derived from 2000 U.S. Census Data, the combined minority labor force is approximately 27 percent. Therefore, the state of EM's corporate diversity profile is not in dire straits but there is room for improvement. However, the work that needs to be done entails addressing cultural and ethnic deficiencies at individual sites, where its representation for each minority group is below their local labor statistic for the area/region. EM will continue to make every effort to locate, attract, and retain qualified minorities.

Figures A-6 and A-7 show the diversity profile comparison between EM and the civilian labor force.

**Figure A-6. EM Diversity Profile**



**Figure A-7. Civilian Labor Force Diversity Profile**



**Table A-2. EM Retirement Eligibility by Occupational Series – Complex-Wide**

Occupational Group	Series	Current Workforce (As of 7-22-06)	Retire Immediately (As of 7-22-06)	Retire in Next 5 Years (7-22-06-7-22-11)
Safety & Occupational Health Mgmt	18	5	1	1
Environmental Protection Specialist	28	19	3	7
Security Administration	80	39	10	12
Human Resources Management	201	23	5	4
Human Resources Assistant	203	6	1	2
Equal Employment Opportunity	260	3	0	1
Miscellaneous Admin & Program Spec.	301	60	7	14
Miscellaneous Clerk and Assistant	303	35	3	10
Mail and File	305	1		
Secretary	318	50	4	9
Office Automation Clerical & Assistant	326	4	0	1

## Appendix A Demographics

Occupational Group	Series	Current Workforce (As of 7-22-06)	Retire Immediately (As of 7-22-06)	Retire in Next 5 Years (7-22-06-7-22-11)
Administrative Officer	341	4	0	0
Management and Program Analysis	343	112	12	26
Mgmt, Program, & Clerical Assistant	344	9	2	1
Logistics Management	346	1	1	0
Equal Opportunity Compliance	360	1	0	1
Equal Opportunity Assistant	361	1	0	0
General Biological Science	401	6	0	1
Financial Administration and Program	501	2	1	1
Financial Clerical and Technician	503	2	0	1
Financial Management	505	2	0	1
Accounting	510	33	1	7
Auditing	511	1	1	0
Accounting Technician	525	1	0	0
Budget Analysis	560	42	4	8
General Health Science	690	3	0	2
General Engineering	801	381	66	89
Safety Engineering	803	2	2	0
Fire Protection Engineering	804	5	1	1
Materials Engineer	806	1	0	0
Civil Engineer	810	2	0	0
Environmental Engineering	819	24	3	8
Mechanical Engineering	830	2	0	1
Nuclear Engineering	840	44	3	7
Electrical Engineering	850	2	0	0
Electronics Engineering	855	1	0	0
Chemical Engineering	893	4	0	1
General Attorney	905	28	2	5
Paralegal Specialist	950	3	1	2
Legal Occupation Student Trainee	999	1	0	0
General Arts & Information	1001	1	0	0
Public Affairs	1035	10	1	3
General Business and Industry	1101	26	7	5
Contracting	1102	66	7	15
Industrial Property Management	1103	6	2	2
Purchasing	1105	1	0	0
Procurement Clerical and Technician	1106	2	0	0
Industrial Specialist	1150	1	0	1
Realty	1170	5	0	2
General Physical Science	1301	177	22	43
Health Physics	1306	18	2	8
Physical Science Student Trainee	1399	1	0	0
Technical Information Services	1412	2	1	1
Operations Research	1515	1	0	1

## Appendix A Demographics

Occupational Group	Series	Current Workforce (As of 7-22-06)	Retire Immediately (As of 7-22-06)	Retire in Next 5 Years (7-22-06-7-22-11)
General Facilities, Equipment, & Services	1601	4	0	0
Facility Management	1640	2	0	1
Education and Training Technician	1702	1	0	0
Quality Assurance	1910	4	0	2
Transportation Specialist	2101	9	1	5
Traffic Management	2130	4	1	1
Information Technology Management	2210	9	0	4
<b>Total</b>		1380	187	338
<b>Percent of Total Employees</b>			14%	24%

## Appendix B Site Status

### Richland Operations Office

#### Mission and Scope of Site Activities

The Richland Operations Office (RL) manages cleanup of the Hanford Site, with the exception of the waste tank farms (managed by the Office of River Protection (ORP), and the Pacific Northwest National Laboratory (managed by the Office of Science, Pacific Northwest Site Office). The site was established during World War II to produce plutonium for the nation's nuclear weapons. Peak production years were reached in the 1960s when nine production reactors were in operation along the Columbia River. The last reactor to be shut down was the N-Reactor, and its spent nuclear fuel that was originally stored in the K-Basins has since been relocated to dry storage in the Central Plateau (also known as the 200 Area). Support facilities are located in the 1100 Area, most of which have been turned over to the local community. Soil and groundwater contamination from past operations resulted in placement of the site on the National Priorities (Superfund) List. The Hanford mission is now primarily site cleanup/environmental restoration to protect the Columbia River. The cleanup is addressed in commitments in a 1989 consent agreement, known as the Tri-Party Agreement. Parties to the agreement include the DOE, the U.S. Environmental Protection Agency, and the Washington State Department of Ecology.

#### Projected Staffing Ceiling

RL has 239 Federal employees, predominantly those with engineering skills. RL also provides the full range of support services for RL Federal staff and selected technical, legal, and administrative services for ORP.

Richland Operations Office	Onboard As of 7/22/06	Ceiling		
		FY 2006 Appropriation	FY 2007 Request	FY 2008 Projection
	239	245	245	245

#### Other Staffing Data

The average age of the Federal workforce at RL is 50 years. In FY 2005, the Federal workforce decreased from 276 to 242 as a result of retirements, transfers, or resignations. This represents a 12 percent attrition rate.

Fifty-two employees will be eligible for full retirement by the first quarter of FY 2007. Another 29 employees will be eligible by FY10 for a total of 81. This is a potentially alarming statistic; however, survey information on employees, who would likely retire if a voluntary separation incentive is offered, indicates that 7% (17) will separate by the first quarter of FY 2007, and another 9% (23) by the first quarter of FY 2008. Without a separation incentive, the number of potential retirements would normally be reduced however RL anticipates future attrition rates will be driven more by age than the choice based on separation incentives. The number of potential transfers or resignations is impossible to project but it has been a significant factor in recent attrition rates.

#### Key Near-term Initiatives and Priorities

One of RL's major challenges over the next two to three years is the development and establishment of new major acquisitions for cleanup of the Central Plateau. The cleanup of the Central Plateau is the most costly and challenging work scope on the Hanford Site, and the successful formulation, design, and award of cost-effective contract instruments to accomplish this work in a resource constrained environment represents the single greatest opportunity for improving the return on investment for cleanup dollars expended at the Hanford Site over the next decade. This effort requires the dedication of the most experienced, and talented resources available in the EM complex.

## Appendix B Site Status

### History of Workforce Planning Process

Over the past 24 months RL has been migrating from a traditional line organization to a project management matrix organization and is continuing to shift to a culture of changing work assignments versus long-term connected, repetitive assignments. During 2005, RL established a Project Portfolio which outlined the structure and approach for most effectively managing its projects. A plan of action, with milestones necessary to meet the project management objectives contained in the portfolio, was developed and tracked to completion with the following results:

- » Hired additional senior FPDs in critical projects
- » Established and filled Federal Sub-Project Director (SPD) for each project
- » Established and selected FPD aspirants for succession planning
- » Established core project teams and IPTs for each of the projects
- » Established and filled, Project Control Specialist positions with an accompanying certification program
- » Engaged an increasing number of staff in SEB activities to develop “new contracts” and provide on-the-job training for new skill sets

In a continuing effort, RL senior managers have developed a Vision for 2009 focusing on cleanup -- “Results through People.” The overarching goal is to complete cleanup that is safe for workers, protective of the environment, and respectful of the taxpayer. Senior-level champions are finalizing objectives and measures for success for the next three years in the areas of results, tools, and people.

RL’s authority for offering buyouts remains in effect through the end of calendar year 2007. The existing RL Buyout Plan is being reviewed to determine what changes are needed to align with the Vision for 2009. Increased staffing targets have resulted in the ability to approach buyouts as an opportunity to restructure and reshape the workforce with an emphasis on succession planning.

During FY 2005, an informal skill gap analysis was conducted and reflected potential shortages in the following areas: Contract Officers/Specialists, FPDs, Project Control Specialists, P3 Schedulers, Cost Estimators, and Budget Analysts. RL has been able to recruit and fill three Contract Officers and one Contract Specialist. Senior-level Federal and Sub-Project Director positions have been filled and RL is in the process of certifying the incumbents through HQ-Office of Engineering and Construction Management (OECM). Project Control Specialists, P3 Scheduler, and Cost Estimator skills are being obtained through contracts until the Federal staff can become self sufficient. Budget Analyst needs are still being evaluated.

In addition, a workforce analysis to identify critical technical skill needs was recently completed in conjunction with the FTCP. A Fire Protection Engineer, NEPA Compliance Officer, SSO Specialists, and Security Specialists were highlighted as potential shortage areas for RL and all have since been filled. Recruitment efforts for a Fire Protection Engineer and NEPA Compliance Officer are currently underway. Additional assessments are taking place to address requirements driven by the DOE IP for DNFSB 2004-1.

### Proposed Remedies for Skill Gaps

A Five-Year Workforce Management Plan was completed in April 2006 and reflects alignment with the Vision for 2009. Information from the Plan will be updated annually and used in developing future budget requests.

In May 2005, RL senior management completed an organization by organization review of products and services to determine essential tasks and appropriate staffing requirements. During the first quarter of FY06 an enhancement to the products and services information correlating to activities and skill types of all Federal staff and support contractors was collected. The RL Leadership Team (consisting of Assistant

## **Appendix B Site Status**

Managers, Office Directors, Division Directors and Federal Project Directors) allocated and identified the number of types of skills/functions required for each position in their assigned organization.

Results of the workforce analysis indicate skill gaps reflective of a significant number of expected retirements and no offsetting decrease in work scope of the next five years. To address these gaps RL is requesting a temporary increase above the authorized staffing target level of 245 to provide the flexibility needed to recruit and fill vacant positions with entry to mid-level staff without losing critical technical capability. RL intends to work with EM-HQ in the coming months to establish a flexible FTE ceiling that allows for a reasonable surge in hiring new workers into critical skill areas with overlapping time for knowledge transfer from experienced workers to new hires. The hiring surge is expected to take the RL ceiling temporarily to 260 in FY07 with a ramp down to 245 over FY08 and FY09.

### **Plans and Schedule**

- » Update Five-Year Workforce Management Plan by January 2007.

## Appendix B Site Status

### Office of River Protection

#### Mission and Scope of Site Activities

In order to more effectively manage the River Protection Project and in response to Section 3139 of the *Strom Thurmond National Defense Authorization Act* for Fiscal Year 1999, the Secretary of Energy established the ORP at the Hanford Site in the State of Washington. The Office of River Protection (ORP) is responsible for the storage, retrieval, treatment, immobilization, and disposal of tank waste and the operation, maintenance, engineering, and construction activities in the 200 Area Tank Farms. These Tank Farms include 177 underground storage tanks (149 single-shell tanks and 28 double-shell tanks) that contain approximately 190 million curies in approximately 53 million gallons of chemically hazardous radioactive waste from past processing operations. A multi-year construction project to build a Waste Treatment and Immobilization Plant (WTP) to process and immobilize the tank waste is ongoing.

#### Projected Staffing Ceiling

In the near-term, ORP will manage to the personnel ceiling of 110 FTE, and in the next five to ten years, ORP has set a target personnel ceiling of 115 FTE due to the delay in the WTP project.

Office of River Protection	Onboard As of 7/22/06	Ceiling		
		FY 2006 Appropriation	FY 2007 Request	FY 2008 Projection
	101	110	115	115

#### Key Near-Term Initiatives and Priorities

The ORP mission establishes a clear closure end-point but changes in work activities through time drive the need for transition from an organization focused on project delivery and simple operations to a suite of integrated, large-scale, and complex operations. There are two periods of interest in executing the ORP mission: FY 2006-FY 2017 (construction, testing, and commissioning) and FY 2018 (operations) and beyond.

During FY 2006 through FY 2017, ORP will continue with Federal responsibilities for project delivery and make minor changes to focus line organization responsibilities for mission performance. Additionally, ORP will transition from major project delivery activities into Federal responsibilities for commissioning and operations. In the long-term (FY 2018 and beyond), ORP will support a limited number of project delivery activities and focus on the Federal responsibilities for a suite of integrated, large-scale, and complex vitrification operations.

ORP currently has a four direct-report organization structure designed to instill line management accountability and align ORP to operate effectively as an owner-driven, safe-performing organization. They have requested approval to create a fifth direct-report organization – the Acquisition Management Division (AMD), to more extensively manage ORP's contracts.

#### History of Workforce Planning Process

##### Acquisition Management and Other Support Functions

In alignment with the workforce goals per this EM Implementation Plan (IP), ORP is focusing on its acquisition process and creating new organizational structures to manage its acquisition and contracting processes. Historically, ORP was required to use the Richland Operations Office (RL) for "support" functions (i.e., mainly administrative) beyond the minimum staffing ORP in order to minimize duplication of efforts between the two DOE offices managing Hanford. These supplementary functions included Contracts, Legal, Budget and Finance, Human Resources, Property Management, Contractor Industrial Relations, and some technical areas in which ORP needed support (will be discussed below). For these reasons, ORP has not performed a formal workforce analysis for many of these areas. In the past seven years, if a shortfall arose, ORP received assistance from RL or hired contract support to fill the need. Due

## **Appendix B Site Status**

to identified project shortcomings, ORP was directed in a memorandum titled "Actions for the Waste Treatment Plant Project," dated October 24, 2005, from James A. Rispoli to the EM organization, to create a procurement organization at ORP. Additional HQ guidance also suggested that ORP should hire its own Property Management Officer – a function previously and completely provided by RL. It has become necessary for the office to be more self-sufficient in order to provide the appropriate contract management and oversight necessary for project recovery and success. Due to these changes, ORP's current contract management gaps consist of Contract Specialists, a Contracts Attorney, and a Property Management Specialist. Future attrition estimates based on retirement projections through 2010 (average ORP age is 51) indicate additional shortfalls during the next five years for Warranted Contracting Officers. ORP will perform a workforce analysis of the other support functions mentioned above in the third quarter of FY 2006 to determine if there are any other skill gaps.

### **Project Management Functions**

In alignment with the workforce goals per this EM IP, ORP is focusing on successful execution of its contracts with credible baselines and placing significant emphasis on improving its project management skills. ORP has not performed formal workforce analysis but, due to identified project shortcomings and PMCPD certification requirements, ORP has identified skill gaps in both the Project Management (Sub-Project Directors) and Project Controls (Project Controls Specialists) Functions.

### **Technical Functions**

In alignment with the workforce goals per this EM IP, ORP is striving to be as technically competent as its contractors in all relevant disciplines. Through the FTCP requirements, ORP has conducted workforce analysis of its technical positions over the past three years. The FY 2004 FTCP technical workforce analysis identified Fire Protection, Nuclear Safety Specialist (Authorization Basis), and Facility Representatives as gaps. Through the planned actions in the ORP Succession Plan, those gaps were filled in 2005. The current FTCP technical workforce analysis, dated December 29, 2005, identifies a current shortage of personnel in the areas of Criticality Safety (1 FTE), Environmental Compliance (1 FTE), Industrial Hygiene (1 FTE), and Nuclear Safety Specialist (Authorization Basis) (1 FTE). Future attrition estimates based on retirement projections through 2010 indicate additional shortfalls during the next 5 years for STSMs, Civil/Structural Engineering, Mechanical Systems, Radiation Protection, and Safeguards and Securities.

### **Leadership Competency**

In 2003, ORP used a facilitated process using Lominger tools and identified leadership as a necessary development area for the success of its mission. Specifically, continuity of leadership, leadership focused on operations, and change management were essential to future success. ORP is currently feeling the effects of retirements in this area and has identified the potential for a gap of qualified candidates to "fill the pipeline" in the future. Current leadership position gaps include a Division Director and a Team Lead with exceptional environmental compliance knowledge. Specific leadership skills to strengthen include: motivating others, integrity and trust, sizing up people, managing diversity, conflict management, standing alone, and decision quality.

### **Proposed Remedies for Skill Gaps**

ORP is currently combining the FTCP data and its current Succession Plan to create a new, all encompassing Five-Year Workforce Plan (i.e., HCMP). Our current Succession Plan dated September 2003 is a five-year description of actions to mitigate changing workforce requirements. As stated above, ORP has not performed formal workforce analysis for functional areas other than the technical positions as required through the FTCP. This analysis will be completed and incorporated in a new ORP Workforce Plan this fiscal year. Current remedies for the functional areas described above follow:

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### Acquisition Management

ORP is currently creating an AMD and aggressively recruiting through government-wide and public announcements for additional procurement staff, including up to seven contract specialists and a contracts attorney. A Procurement Director was appointed in February 2006 and is planning to have at least 50 percent of the new positions selected by the end of March 2006. Additionally, ORP is planning to “grow our own” Property Management Officer through selection of a strong internal candidate and a rigorous training program.

### Project Management

ORP’s two FPDs have received certification through the PMCDP. Additionally, ORP recently partnered with RL to internally recruit for higher graded Sub-Project Directors that will require PMCDP certification. Two Sub-Project Directors were selected for the Tank Farms Project. ORP is aggressively recruiting for two more positions through government-wide and public announcements. Approval to fill internally a fifth Sub-Project Director position has been requested through an EM-wide announcement. Additionally, RL and ORP are creating a “grow your own” program for Project Controls. Two ORP positions will be recruited internally and externally with selections anticipated by June 2006.

### Technical Functions

In FY 2005, ORP filled the gaps in Fire Protection, Nuclear Safety Specialist, and Facility Representatives identified in the FY 2004 FTCP Technical Workforce Analysis through internal merit-promotion announcements, reassignments from other EM sites, and retention allowances. For current gaps identified in the FY 2005 FTCP Technical Workforce Analysis, ORP is using a variety of methods to fill the gaps in Industrial Hygiene, Environmental Compliance, Criticality Safety, and Nuclear Safety (Authorization Basis). ORP is recruiting new staff using public vacancy announcements and excepted service appointing authority with the required skills. For Nuclear Safety (Authorization Basis), ORP is “growing their own” through selection of strong internal candidates and a rigorous training program.

For potential future gaps (FY 2006-FY 2010), particularly Civil Engineering, Chemical Processes, Electrical Engineering, Instrument and Control, and Mechanical Engineering, ORP is developing staff through the SSO Program. The potential shortage in positions provide ORP with more lead time to consider multiple options for filling gaps including recruitment, intern usage, and the DOE Scholars Program.

### Leadership Competency

To fill the current gaps in ORP leadership consisting of a Division Director and a Team Lead, ORP has requested approval to recruit for these positions using EM-wide and public announcements, as well as excepted service appointing authority. Additionally, ORP is currently using training (e.g., development programs, on the job, etc.) to develop the competencies necessary for current leaders and prepare potential leaders for competition of expected future openings. We will expand this effort during the summer to include assessment of current leaders using a simple survey process (Lominger Method). This will be offered to non-supervisory staff in assessment in FY 2007. ORP plans to accelerate development by combining challenging assignments with coaching and shadowing throughout FY 2007-FY 2008.

### Plans and Schedule

- » Create and staff a new Contract Administration Organization in FY 2006
- » Complete 2006 ORP HCMP in FY 2006
- » Assess current leaders using a simple survey process in late summer 2006
- » Project Manager recruitment and certification throughout FY 2006-FY 2007
- » Filling gaps identified in FTCP Technical Workforce Analysis throughout FY 2006

## Appendix B Site Status

### Savannah River Operations Office

#### Mission and Scope of Site Activities

The Savannah River Site (SRS) is a key DOE industrial complex dedicated to the DOE national security and non-proliferation programs; and the EM program that addresses the reduction of risks through safe stabilization, treatment, and disposition of legacy nuclear materials, spent nuclear fuel, and waste. The SRS encompasses over 300 square miles with more than 1,000 facilities concentrated within only ten percent of the total land area. As cleanup activities are completed, operations will be concentrated to the site central core area. The land surrounding the central core area provides a protective buffer. All EM facilities and inactive waste units are being deactivated, decommissioned, and remediated. Facility decommissioning alternatives include demolition and in-situ disposal. However, if a viable reuse is identified, the DOE SR will remove a facility or group of facilities from the decommissioning scope.

#### Projected Staffing Ceiling

Savannah River Operations Office	Onboard As of 7/22/06	Ceiling		
		FY 2006 Appropriation	FY 2007 Request	FY 2008 Projection
	320	348	345	345

#### Other Staffing Data

The permanent staffing level is below the target of 348. DOE SR plans to take advantage of this opportunity to staff several senior-level positions and to aggressively staff much needed entry-level positions.

It is anticipated that DOE SR will increase its staffing levels during FY 2006 and FY 2007. Ten of these will be external hires at the entry-level position. The remaining ten personnel will be from external staffing and some internal staffing changes at various grade levels. Exceptions to the EM Hiring Controls are under development for six of these actions. Recruitment will begin immediately upon EM approval.

#### Key Near-Term Initiatives and Priorities

Until the Request for Proposal for the SRS Contract Acquisition Strategy is released, it is premature to estimate the significance of the impacts this change will have on the DOE SR workforce and the skills. However, DOE SR anticipates that a change to multiple operating contracts resulting from the Strategy will require additional skills within contracts management, specifically in the areas of Construction Contracting Administration, Cost-Reimbursement Contracting Incentives, Formal Source Evaluation Board, Contract Awards, and Cost-Price Analysis.

#### History of Workforce Planning Process

The FY 2000 DOE SR Five-Year SP established a workforce baseline for DOE SR and a framework for workforce downsizing, coupled with skills development and promoting diversity. It incorporated various operational level plans, such as the Workforce 21 Plan (balancing workforce diversity profile) and the DNFSB 93-3 IP (maintaining and strengthening technical capabilities). The DOE SRS FY 2001-FY 2006 Staffing Management Plan, which included NNSA organizations at SRS, continued its particular focus on maintaining critical technical and non-technical skills, balancing workforce diversity, and developing a skills pipeline.

On January 23, 2006, SR issued their Five-Year (2006 -2011) Workforce Management Plan. This "Plan" brings focus to managing the workforce by shifting and/or retraining the existing personnel for work that is more directly tied to critical cleanup activities and to creating opportunities for entry-level hiring.

To develop the current staffing analysis, consideration was given to current staffing and an evaluation of potential impacts by various factors. These factors include restrictions on staffing (i.e., the EM Hiring

## Appendix B Site Status

Controls), workforce diversity, SRS facility/area closures, direct DOE SR contracting (i.e., Indefinite Delivery/Indefinite Quantity contracts), aging workforce and retirement projections (eligibility plus three years), and DOE SR's continued support for other EM sites and other PSOs located at SRS. Based on the current scope of work in the PMP, DOE SR predicts that these goals can be attained through regular attrition and the use of workforce restructuring incentives. These staffing levels are projected to remain fairly stable throughout the first half of the Plan but see a slight decline during the last half, mainly due to attrition and completion of projects and work activities. To shift its focus to entry level hiring, Buyout and VERAs must continue to be made available to employees beyond the approved window of the first quarter of FY 2008 (December 31, 2007). DOE SR will request that these authorities be continued, as appropriate, based on future funding/FTE constraints, project activity completions, and additional mission changes.

The DOE SR Leadership Team identified the skill/resource needs for their respective organizations and the gaps between what skill/discipline was needed and what skill/discipline was available for the period of the Plan using the PBS activities and Life Cycle Schedule in the PMP. The majority of the skill gaps were identified for FY 2006 and FY 2007.

### Proposed Remedies for Skill Gaps

The short-term skill gaps that were identified by the DOE SR Leadership Team will be addressed through retraining or additional training of the existing staff to improve skills. Short-term skill gaps were identified in the employees' individual Performance and Development Plans. When considering projected retirements (eligibility plus three years), it was considered that greater than 50 percent loss in a particular job series would create a skill shortfall.

### Other Human Capital Activities

As a result of DOE SR's 2004 Leadership and Organizational Assessment Team study, a Leadership and Supervisory Development Program was designed to provide opportunity to develop and/or enhance leadership and supervisory skills of current and future supervisors. Three non-supervisory employees were selected to participate in this Program. This is a one-year, locally competed, competency-based program. Selected employees participated, along with current supervisors, in the OPM Leadership 360 assessment to identify individual strengths and developmental needs, will develop individual development plans based on the assessment results, and participate in two cross-cutting developmental training sessions. The areas of focus for these training sessions include providing performance feedback, awards equity, and performance management with the emphasis on correcting employee conduct and performance.

### Plans and Schedule

- » Issued SR Five-Year (2006 -2011) Workforce Management Plan on January 23, 2006
- » Conduct year-long supervisory development pilot program in FY 2006
- » Conduct OPM Leadership 360 assessment during second quarter of FY 2006

## Appendix B Site Status

### Portsmouth Paducah Project Office

#### Mission and Scope of Site Activities

For approximately 50 years, the Portsmouth Gaseous Diffusion Plant in Portsmouth, Ohio, and the Paducah Gaseous Diffusion Plant in Paducah, Kentucky, supported Federal government and commercial nuclear power missions. Decades of nuclear energy and national security missions left radioactive and chemical contamination at both sites. The missions of the sites are transitioning from primarily enrichment operations to shared missions with environmental cleanup, waste management, depleted uranium conversion, deactivation and decommissioning, re-industrialization, and long-term stewardship. DOE established the Portsmouth/Paducah Project Office (PPPO) on October 1, 2003, to provide focused leadership to the sites' changing missions and to oversee cleanup and disposition of the DOE's stockpile of depleted uranium hexafluoride stored at the sites.

#### Projected Staffing Ceiling

Portsmouth Paducah Project Office	Onboard As of 7/22/06	Ceiling		
		FY 2006 Appropriation	FY 2007 Request	FY 2008 Projection
	37	44	44	44

#### Other Staffing Data

PPPO prepared a staffing analysis that identified the functional expertise required to successfully fulfill their mission. This analysis was shared with DOE EM in September 2005. The analysis took into consideration the current staffing level, current vacancies, current PPPO scope of work, and the potential for additional scope of work in the outyears. The results of the analysis concluded that the PPPO needed 63 FTEs and approximately 18 matrixed FTEs from Oak Ridge and/or the EM CBC to execute the mission. No adjustments to PPPO's current ceiling of 44 FTEs have been made subsequent to completion of the analysis.

#### Key Near-Term Initiatives and Priorities

PPPO has encountered many challenges staffing the office that were not previously identified in the original SP. These challenges have come in the form of additional work scope, such as the D&D effort that is proposed for the Portsmouth Facility. The development of this Scope of Work is currently underway. The schedule for release of the Request for Proposal is estimated to be within the next 18-24 months. The estimated project duration is approximately nine to eleven years.

Activities associated with administration of the Lease Agreement with the United States Enrichment Corporation have also placed a significant burden on PPPO resources. The FTEs identified to manage this work scope are currently held by the Oak Ridge Office; however, PPPO is continuing to perform much of the day-to-day oversight of this project. DOE HQ is evaluating whether this work scope should be added to the PPPO mission. If the decision is made to include this work scope under PPPO, additional resources to manage the work would be required.

In addition to unanticipated work scope, PPPO has encountered other challenges. Originally, PPPO was identified to have one large business prime contractor for both sites with an integration function available at the prime contractor's home office. Based on direction received from DOE HQ, PPPO has awarded four small business contracts to perform infrastructure and remediation activities at the sites. The lack of a single, integrating contractor, has made it necessary for PPPO to serve as the integrator between contractors and sites.

Furthermore, PPPO is "one deep" in many of the functional areas required to support the PPPO mission. Due to this level of staffing, the PPPO program is significantly impacted when an individual is on travel, vacation, or sick leave. In addition, the ability to provide job-related or developmental training to the staff

## Appendix B Site Status

is limited because there is no backup when an individual is out of the office. PPPO has also faced significant difficulty recruiting highly qualified candidates interested in relocating to the Lexington, Kentucky; Paducah, Kentucky; and Portsmouth, Ohio, sites.

### History of Workforce Planning Process

An SP outlining the necessary vacancies needed to reach our current staffing ceiling was approved by DOE HQ on October 14, 2005. PPPO currently has 38 employees onboard with 6 vacancies. The status of the 6 vacancies is as follows:

- Offers have been extended and accepted for one of the vacancies;
- PPPO is in the process of reviewing applications, for one of the vacancies.;
- A Subject Matter Expert (SME) is reviewing applications for one of the vacancies.;
- A vacancy announcement just closed for another one of the vacancies;
- PPPO is currently working on PDs for two of the vacant positions

### Proposed Remedies for Skill Gaps

PPPO is in the process of drafting a Workforce Management Plan. The Plan assumes the current ceiling of 44 FTEs and identifies the staffing level and technical expertise needed for continued operation of the PPPO and completion of its mission at the Portsmouth, Ohio, and Paducah, Kentucky, facilities for the years 2007 through 2011. The Plan focuses on completing the initial staffing required to reach the current ceiling of 44 FTEs. Additional attention will be paid to retaining that staff; identifying future staffing needs and FTE increases; and refocusing efforts as new and different scopes of work are developed under the responsibility of PPPO.

To support DOE's initiative to have an excellent, high quality, and well-trained workforce, PPPO has provided three onsite PMCDP training courses to our employees. PPPO is discussing the option of having a fourth PMCDP onsite training course brought to the PPPO later this year. A fourth PMCDP course is scheduled at the PPPO August 22-24, 2006.

The PPPO currently is reviewing the technical certifications of the existing staff to ensure that individual employees possess the appropriate functional competencies to successfully implement the PPPO mission.

### Plans and Schedule

- » PPPO will work with the CBC to ensure the remaining vacant positions will be announced within the next 30-60 days
- » PPPO will continue to submit Hiring Control Exception Requests to EM-41 for future vacancies that have not received prior approval by EM-2
- » PPPO will complete the draft Workforce Management Plan during the 4th quarter of FY 2006
- » Throughout FY 2006 and beyond, PPPO will continue to develop its staff and provide access to various technical, professional, and administrative training courses, and when beneficial provide cross training at the various sites
- » PPPO will identify and document the technical certifications required to fully execute the PPPO mission. PPPO will ensure employees receive the appropriate training to obtain the proper certification. PPPO will also ensure employees maintain their technical competencies
- » PPPO will continue to evaluate mission needs and identify any necessary additional resources needed to execute mission

## Appendix B Site Status

### EM Consolidated Business Center

#### Mission and Scope of Site Activities

The CBC was established in October 2004 to consolidate support functions of DOE's Environmental Management closure sites and other designated sites in the areas of human resources, financial management, contracting/procurement, information management, logistics, legal services, and technical support. Customer sites currently include the Ohio Field Office (Ashtabula, Ohio; Columbus, Ohio; Fernald, Ohio; Miamisburg, Ohio; and West Valley, New York); The Rocky Flats site (Denver, Colorado); Carlsbad Field Office (Carlsbad, New Mexico); and the Portsmouth/Paducah Project Office (Lexington, Kentucky)).

#### Projected Staffing Ceiling

EM Consolidated Business Center	Onboard As of 7/22/06	Ceiling		
		FY 2006 Appropriation	FY 2007 Request	FY 2008 Projection
	131	145	150	150

#### Other Staffing Data

Twenty-five employees (43 percent) in the key professional and administrative occupations will be eligible for voluntary retirement by December 31, 2011. An additional eight employees (14 percent) will be eligible for early retirement by the same date. Although the marked increase in retirement eligibility in five years does not pose an immediate concern relative to maintaining critical competencies, it supports the need for utilization of entry-level recruitment to ensure the necessary level of competence is maintained when those employees retire.

#### History of Workforce Planning Process

The CBC is in the early stages of developing its Workforce Management Plan. The Plan will identify staffing and workforce capabilities needed for continued operation of the CBC during the period from 2006 through 2011. The Plan will focus on the CBC mission and expected changes in resources needed to carry out the mission, and the level and type of competencies required to maintain, as well as enhance, organizational performance. This will be particularly important in identifying strategies to address expected skill gaps in the key professional and administrative occupations.

#### Proposed Remedies for Skill Gaps

Over the next 30-60 days, the CBC will continue to staff its remaining vacancies. Included in these recruitment activities is the entry-level recruitment to fill six positions in the contracting, financial management, human resources, and legal occupations. This recruitment strategy will address eventual skill gaps.

The following vacancies are expected to be filled within the next 30 to 60 days:

- » An FPD, ES-340, is awaiting decision by the ERB on the candidate recommended for selection
- » 14 positions have selection certificates pending decision by the supervisor
- » Two positions are under announcement
- » Seven positions are pending classification

#### Other Human Capital Activities

To support DOE's initiative to have an excellent, high-quality, and well-trained workforce, the CBC will host an onsite ACDP training course for its employees who are required to obtain ACDP certification. The course, "Contract for Technical Representatives," was conducted March 7-9, 2006. In addition, the CBC is actively supporting the appropriate implementation of the DOE PMCDP. The CBC has requested that a representative of EM-41 brief managers and selected employees on the PMCDP.

## **Appendix B**

### **Site Status**

#### **Plans and Schedule**

- » The CBC is recruiting to fill approximately 20 contracting positions across the EM complex. These positions are advertised on an “open-continuous” basis to address the hiring needs of the various EM field sites. The positions were posted in mid-February 2006 and selection certificates will be issued upon request
  
- » The CBC will complete its Workforce Management Plan on or about June 30, 2006
  
- » Throughout FY 2006 and beyond, the CBC will continue to develop assigned staff and provide opportunities for formal and informal (i.e., on-the-job) training in various technical, professional, and administrative functional areas, and when beneficial, provide cross training at the various sites

## Appendix B Site Status

### Idaho Operations Office

#### Mission and Scope of Site Activities

The Idaho Cleanup Project (ICP) consists of Special Nuclear Material Disposition; Spent Nuclear Fuel Disposition; Tank Farm Closure; Calcine Disposition; TRU Waste Disposition; Soil and Water Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) Remediation; Nuclear and Non-Nuclear Facility Disposition; and Environmental Monitoring. The baseline has all cleanup completed by 2035 and, at that time, turning over any ongoing monitoring and maintenance of the remedies to Long Term Stewardship. In May 2005, DOE put in place a cost plus incentive fee contract to significantly focus on risk reduction, footprint reduction, and complete a significant amount of cleanup by 2012. In addition, DOE has another major contract in place at the Advanced Mixed Waste Treatment Project (AMWTP) facility to retrieve, compact, certify, and ship 65,000 cubic meters of TRU waste to WIPP. This work is planned for completion by 2012. In November 2005, Idaho completed a re-baselining of the Life-Cycle cleanup work scope, schedule, and cost. This new baseline is currently under review by OECM. The External Independent Review (EIR) portion of the OECM review was completed in January 2006. The EIR final report is expected to be issued in February 2006. Idaho expects to complete most of the cleanup by 2012, at which time the only cleanup remaining will be to disposition the remaining Spent Nuclear Fuel (SNF), retrieve and disposition Calcine (High-Level Waste created during SNF reprocessing), final remediation of soils and the Snake River Plain Aquifer, and D&D of excess facilities. Major acquisitions will be conducted as follows:

- 2008 - competitively award the AMWTP for operations from 2008-2012
- 2012 - competitively award the ICP for at least five years of cleanup work
- 2009 - award a contract to begin repackaging SNF

#### Projected Staffing Ceiling

Idaho Operations Office	Onboard As of 7/22/06	Ceiling		
		FY 2006 Appropriation	FY 2007 Request	FY 2008 Projection
	55	67	67	67

#### Other Staffing data

By the end of March, the onboard FTEs were down to 56. Additionally, 1 FTE has indicated their intent to retire and leave Federal service by the end of June 2006. This would bring the FTE count down to 55.

The ICP receives business support services from a matrix organization within the Office of Nuclear Energy, Science and Technology (NE), who is the Lead PSO for the Idaho Operations Office. These services include contracting, budget, human resources, finance, and industrial relations. This allows EM's ICP resources to focus on effectively executing its cleanup mission.

#### History of Workforce Planning Process

The ICP has and will continue to perform periodic staffing analyses and need projections. Recently, ICP completed the Annual [Technical] Workforce Analysis and SP Report, which concluded that they have the necessary technical staff onboard or are taking steps to obtain the needed resources. Additionally, ICP has performed an indepth, bottoms-up Functional Analysis to determine and project staffing/critical skills needs for FY 2006-FY 2012. The analysis provides: 1) Overview of the ICP scope and schedule; 2) Current Staffing Status; 3) Planned Staffing Activities; 4) Staffing Actions Schedule and Milestones; 5) Deliverables. The analysis shows that starting in 2008; due to the age of the workforce, attrition is anticipated at three to four positions per year through 2012.

## Appendix B Site Status

### Proposed Remedies for Skills Gaps

The ICP is requesting approval from the Principal DAS for Environmental Management to fill 12 positions needed, which will bring the FTE staffing level to the FY 2006/FY 2007 approved level of 67.

Of the 12 positions identified, five positions are needed to address the safety oversight program performance, which was identified by EM's Safety Management and Operations HQ Office as being deficient in the Integrated Assessment of Oversight Review at Idaho. The report identified several safety related skill mix gaps that need to be filled. One position will backfill a Facility Representative position being vacated in the very near future. The other six positions are needed to support implementation of DOE Order 413.3 and other directives related to improving Project Management capabilities and skills within the Federal staff to ensure effective execution of the cleanup projects at Idaho. Within the past year, ten personnel have moved outside the organization or retired and responsibilities were absorbed and the positions will not be backfilled. An internal review of existing skills and capabilities in the areas of safety oversight and project management indicate that existing personnel are fully engaged/utilized and precludes moving existing personnel to these positions as it would simply create new voids. The 12 positions will be posted throughout the EM complex, as well as nationally, if the resources cannot be obtained within the existing cadre of EM Federal employees across the complex. Priority will be given to EM Federal employees who possess the necessary skills, experience, and capabilities to fill these positions. The ICP outyear hiring strategy will focus on filling necessary skill gaps due to attrition and to support major acquisitions by focusing in areas of project management, cost estimation, and contracts.

### Plans and Schedule

- » Obtain EM HQ approval to hire staff needed to support the FY 2006/FY 2007 67 FTE target by April 2006
- » Upon approval by EM HQ, post hiring announcements
- » Fill vacancies by June 2006
- » Submit annual hiring control action request as needed to anticipate attrition, fill necessary skills, and best prepare for future mission work

## Appendix B Site Status

### Oak Ridge Office

#### *Mission and Scope of Office Activities*

The Office of the Assistant Manager for Environmental Management's (AMEM) mission in the Oak Ridge Office (OR) is to safely complete cleanup that will result in reduced risks to the public, workers, and the environment at the East Tennessee Technology Park (ETTP), Oak Ridge National Laboratory (ORNL), Y-12 NNSA Complex, and offsite areas. These risks include potential exposure to contamination and industrial hazards resulting from decades of uranium enrichment (ETTP), research (ORNL), and weapons-related operations (NNSA). To carry out its mission, the AMEM ensures that the principles of ISM are implemented into all work activities, and implements the requirements for the safe operation of nuclear facilities; this includes ensuring that the requirements of approved safety basis documents are flowed down. The OR Environmental Management Plan includes remediation of the highest risk sites on the Oak Ridge Reservation (by 2006), final disposition of one of the largest legacy low-level waste inventories in the DOE complex (completed in 2005), and closure of the ETTP site (by 2009). Specific projects include:

- Three Building (K-29/K-31/K-33) Project
- TRU Waste Processing Project
- Legacy Waste Project
- Melton Valley Closure Project
- ETTP Closure Project
- Balance of Reservation Project
- David Witherspoon Sites

Recent changes include:

- The addition of the Building 3019 Uranium<sup>233</sup> Disposition Project this year to the AMEM scope of work
- Transfer scope and personnel for newly generated waste at Y-12 to NNSA
- Planning for two additional closure projects, which could begin in 1-2 years dependent upon approvals and appropriations (demolition of an additional 200+ facilities at ORNL and Y-12 and associated remedial actions)

#### *Projected Staffing Ceiling*

The AMEM currently has 85 Federal employees, predominantly those with engineering and scientific skills. Support services for AMEM Federal staff and financial, legal, and some technical services are provided by OR Federal employees.

Oak Ridge Office – Assistant Manager for Environmental Management	Onboard As of 7/22/06	Ceiling		
		FY 2006 Appropriation	FY 2007 Request	FY 2008 Projection
	85	85	85	85

## Appendix B Site Status

### Other Staffing Data

The average age of the Federal workforce in OR is 49.1 years. In FY 2005, the AMEM workforce decreased from 112 to 91 as a result of retirements, reassignments, and transfers of function to PPPO. This represents a 19 percent attrition rate, which is extraordinarily high. Typical rates of attrition average three to four percent.

In the next five years, it is anticipated that at least three senior technical managers, six facility representatives, and four others from other technical capabilities will become eligible for retirement. Although there is no specific data on the potential future attrition, it must be considered due to the increasing age of the workforce.

### Key Near-Term Initiatives and Priorities

One of the AMEM's major challenges over the next two to three years is the authorization, planning, and acquisition associated with the Integrated Facility Disposition Project (IFDP). The IFDP will support DOE's mission of completing environmental cleanup of the DOE Oak Ridge Reservation; advancing the national, economic, and energy security of the U.S.; and promoting scientific and technological innovation.

Disposition of excess facilities is consistent with DOE's commitment to better management of Federal real estate property in accordance with the framework set forth in the PMA. In order to meet DOE's cleanup goals at ORNL and Y-12, a new strategy needs to be implemented that consolidates and integrates environmental cleanup activities, excess facility disposition, and other mission priorities of Oak Ridge sites, including EM, NNSA, and NE programs.

Modernization efforts have changed the scope of ORNL and Y-12 environmental cleanup efforts needed to meet DOE's current mission objectives. Today's EM life-cycle baseline does not account for the effects of recent mission evolution, modernization activities, and continuing facility deterioration at ORNL and Y-12. In addition, management of the environmental cleanup effort is divided between multiple DOE departments, programs, and organizations in Oak Ridge, including EM, Office of Science, NNSA, and NE. Furthermore, several facilities are jointly owned by EM, SC, and NE, resulting in the need for an integrated approach to address disposition of excess facilities and associated soil and groundwater remediation.

The scope of the IFDP includes regulatory document preparation; legacy material and facility characterization; D&D (including deactivation, decontamination, decommissioning, and demolition); waste and equipment disposition; remediation of underlying contaminated soil and groundwater; and capping and closure of active and inactive landfills. The IFDP will be conducted under the CERCLA, as specified by the Federal Facility Agreement and the Records of Decision for ORNL and Y-12.

In addition, during the FY 2006 appropriation process, Congress added the Building 3019 Uranium<sup>233</sup> Disposition Project to the AMEM scope of work. This scope of work could take about ten years and about \$250 million to complete, and will be managed as part of the IFDP.

The AMEM organization will be planning and executing these activities while completing the \$2+ billion accelerated cleanup contract with Bechtel Jacobs Company, LLC (BJC).

In the next few years, there will be an overlap of new projects starting (IFDP and 3019) and the completion of the current work (BJC). During this overlap of approximately two years, the technical and management staff may need to prioritize tasks due to workload increases. Due to the relatively short duration of this increased workload, it is not considered necessary to increase Federal staff. If required, contract support staff will be used during this period. The number of employees and the technical capabilities of the staff will be re-evaluated during this time to ensure an appropriate mix of skills is available to adequately manage and oversee the new closure projects.

## Appendix B Site Status

### ***History of Workforce Planning***

An OR Annual Workforce Analysis and SP Report (as of December 31, 2005) was completed on January 30, 2006. This plan addressed current shortages and plans for filling them as follows:

***STSMs:*** Currently, the AMEM has ten positions that require the STSM Qualification with nine currently filled. Specifically, the following positions require STSM Qualification: AMEM; Chief Operating Officer; Senior Technical Advisor; Project Director (PD)-Melton Valley; PD-Balance of Reservation; PD-ETTP; PD-K25/27; PD-3019; Division Director, Technical Support and Assessment Division; and the Senior Nuclear Safety Program Manager. The PD-K25/27 has been filled, and the PD-3019 position has been posted. Within the AMEM, all technical work is accomplished under the management direction of one or more qualified STSMs.

***Facility Representatives (FRs):*** The current onboard FR staffing levels of 20 are adequate to properly oversee both the nuclear and non-nuclear facilities and projects in the AMEM. One FR will be transferred to NNSA with the facilities that treat newly generated waste. Recently, five FRs were hired and assigned facilities. The hiring of any additional FRs will not occur until the confidence in future remediation projects increases and the need for additional FRs is evaluated. This status is re-evaluated annually and as work scope changes.

***SSO Personnel:*** The AMEM currently has 22 safety systems identified in 12 Documented Safety Analyses and two SSO FTEs. The SSO disciplines are the Criticality Accident Alarm System, Instrumentation and Control, Ventilation Systems, and Fire Protection and they are covered by four individuals totaling two FTEs. The need for a Fire Protection SSO had been identified previously and the position has recently been filled.

***SMEs:*** SME support for the AMEM for day-to-day operations and oversight activities is provided in 12 different disciplines by 30 FTEs. The Nuclear Safety Discipline is currently provided by four contractors directly to the AMEM. The balance of subject matter expertise is furnished by either full-time AMEM employees or individuals that are dedicated to the AMEM under an organizational matrix arrangement. In the isolated and unusual circumstances where additional expertise may be needed for an emerging or unplanned activity, appropriate compensatory arrangements are available through other local OR organizations, personnel from other DOE sites, and/or contract consultants.

Additional workforce planning will be conducted as part of the Critical Decision (CD) 1 process for the Integrated Facility Disposition Project, the CD-2/3 process for Building 3019 Uranium<sup>233</sup> Disposition Project, and as part of an integrated workforce planning process for all 400 plus Federal employees in the multi-programmatic OR.

## Appendix B Site Status

### Carlsbad Field Office

#### Mission and Scope of Site Activities

The CBFO, located in Carlsbad, New Mexico, was created to serve as the focal point for the nation's TRU waste management efforts since TRU waste is currently stored at many DOE sites across the country. CBFO has responsibility for management of the National TRU Waste Program, whose mission is the implementation and management of a national system that safely and cost effectively provides for the certification, transportation, and disposal of defense-generated TRU waste. WIPP is an integral part of the National TRU Waste Program and is managed by CBFO. This facility, near Carlsbad, New Mexico, is the nation's only mined geologic repository for the permanent disposal of defense-generated TRU waste. The waste disposal area is 2,150 feet (almost one-half mile) below the surface located in 200-million year old stable salt beds. The TRU waste, from all the generator sites that are eligible for disposal at WIPP, must ultimately be transported to this repository for receipt, handling, and disposal.

#### Projected Staffing Ceiling

CBFO is below their approved staffing level of 51 with a current onboard strength of 43. Staffing needs are expected to remain at the current level through 2008.

Carlsbad Field Office	Onboard As of 7/22/06	Ceiling		
		FY 2006 Appropriation	FY 2007 Request	FY 2008 Projection
	43	51	51	51

#### Other Staffing Data

- » 64 percent of staff are above the Grade 13 level
- » 26 percent are female; 74 percent are male
- » CBFO has a highly educated workforce, more than 74 percent have a bachelor degree or higher
- » The average age is 52
- » Through 2010, 14 individuals are eligible for retirement

CBFO has a history of difficulty in hiring due to the remote geographic location. In order to expedite the hiring process, CBFO has received approval from the Principal DAS for Environmental Management to announce all positions EM-wide concurrent with all sources. Priority will be given to EM Federal staff that possess the necessary skills, experience, and capabilities to fill these positions.

Two offers of employment have been accepted and two additional offers are pending. This will bring the onboard FTEs to 46.

#### History of Workforce Planning Process

Prior to opening, CBFO was primarily involved in research and development activities to establish the repository and demonstrate compliance with all regulatory requirements to receive approval to operate the facility. With the opening of the WIPP facility for waste disposal, the skills needed have shifted from Research and Development and public information to operating a nuclear repository. In addition, CBFO is now responsible for development and management of a comprehensive TRU waste management strategy, integrating the various program elements (TRU waste inventory, characterization, certification, transportation, disposal and system integration) carried out across the DOE TRU waste system.

A Human Capital Working Group team was scheduled to visit CBFO in October 2005 to assist in producing a workforce plan. Due to scheduling conflicts and the health of a senior manager at the site, the visit has not taken place.

## **Appendix B Site Status**

### **Proposed Remedies for Skill Gaps**

CBFO plans to manage the workforce by restructuring positions to retain the existing personnel and to create career ladder positions where possible when backfilling open positions.

Four individuals are pursuing Project Management Certification for the FPD program. Three individuals have received certification as STSMs, and two additional employees are pursuing their certification.

### **Plans and Schedule**

CBFO will continue efforts to staff remaining vacancies. These recruitments will help to address the skill gaps that have been identified.

## Appendix C

### Federal Technical Capability Technical Staffing

Technical Capability	HQ FTEs		RL FTEs		ORP FTEs		SR FTEs		PPPO FTEs		CBFO FTEs		Ohio FTEs		Idaho(AMEM)		ORO(AMEM)		Total		
	Need	On board	Need	On board	Need	On board	Need	On board	Need	On board	Need	On board	Need	On board	Need	On board	Need	On board	Needed	On Board	Gap
Senior Technical Safety Manager	3	3	9	9	14	14	19	17	5	4	4	4	4	3	6	6	10	8	74	68	6
Safety System Oversight Personnel			2.7	2.7	8.3	8.3	21	19	1	0	5	5	0	0	3.5	1.5	2	2	43.5	38.5	5
Aviation Safety Officer			0.1	0.1			1	1	0	0					0.05	0.05			1.15	1.15	0
Aviation Safety Manager			0.1	0.1			1	1	0	0									1.1	1.1	0
Chemical Processing	1.25	0.25	0	0	2	2	3	3	0	0			1	1					7.25	6.25	1
Civil/Structural Engineer	1.1	0.1	0.1	0.1	2	2	5	5	0	0	1	1			0.5	0.5			9.7	8.7	1
Construction Management	0.2	0	0	0	2	2	2	0	1	1									5.2	3	2
Criticality Safety	2	1	0.8	0.8	1.2	1	4	3	1	1					1.5	1			10.5	7.8	3
Deactivation & Decommissioning	1	1	0	0			1	1	2	2			2	0	1	1			7	5	2
Electrical Systems	0.2	0	0.2	0.2	1.2	1.2	3	2			1	1	1	1	0.5	0.5			7.1	5.9	1
Emergency Management	5.1	5.1	2	2	0.2	0.2	2	3	1	1	1	1			1.5	1.5			12.8	13.8	-1
Environmental Compliance	0.22	0.22	6	5	2	1	15	15	1	1	4	4			3	3			31.22	29.22	2
Environmental Restoration	0.5	0.5	1	1			10	10	2	2					2	2			15.5	15.5	0
Facility Representative (FR)			18	17	14	14	33	27	4	4	1	1	9	8	12	8	20	20	111	99	12
Facility Maintenance Mgmt	1	0.1	0.1	0.1	0.1	0.1	1	0			1	1							3.2	1.3	2
Fire Protection Engineering	1.9	0.9	1	0	1.2	1.2	3	2	1	1	1	1			1.5	0.5			10.6	6.6	4
Industrial Hygiene	1	0.1	1	1	1.3	1	2	1			1	1			1	0.5			7.3	4.6	3
Instrumentation & Control	0.15	0.13	0.1	0.1	1.5	1.5	2	1											3.75	2.73	1
Mechanical Systems	0.15	0.15	0.1	0.1	2.6	2.6	12	12			1	1			2	0			17.85	15.85	2
Nuclear Explosive Safety			0	0															0	0	0
Nuclear Safety Specialist	2.1	0.1	4	4	6.5	5.3	38	36	1	0	1	1	2	2	2	0			56.6	48.4	8
Occupational Safety and Health	2	1	2	2	1	1	2	2			1	1	1	2	2	1			11	10	1
Quality Assurance	3.9	2.8	2	2	0.8	0.8	1	0	2	2	4	4	1	2	2.5	1.5			17.2	15.1	2
Radiation Protection	1	0.75	3	3	2	2	4	4	1	1	1	1	1	2	1	0.5			14	14.25	0
Safeguards and Security	10	10	14	12	0.3	0.3	15	15	1	0	1	1	0	0	6	6			47.3	44.3	3
Safety Software Quality Assurance	0.3	0	0.1	0.1	0.2	0.2	1	1	1	1	1	1			0.1	0.1			3.7	3.4	0
Technical Program Manager					5	5	1	1					2	1					8	7	1
Technical Training	0.08	0	1	1			10	8	1	1					0.5	0.5			12.58	10.5	2
Transportation and Traffic Management	7.5	7.5	1	1			1	0			1	1	1	0	0.5	0.5			12	10	2
Waste Management	1.5	1.5			1.7	1.7	8	8	1	1	1	1	4	7	6	6			23.2	26.2	-3
Other																			0	0	0
<b>Total</b>	<b>47.15</b>	<b>36.2</b>	<b>69.4</b>	<b>64.4</b>	<b>71.1</b>	<b>68.4</b>	<b>221</b>	<b>198</b>	<b>27</b>	<b>23</b>	<b>32</b>	<b>32</b>	<b>29</b>	<b>29</b>	<b>56.65</b>	<b>42.15</b>	<b>32</b>	<b>30</b>	<b>585.3</b>	<b>523.15</b>	<b>62</b>

## Appendix D

### Acronyms

AACEI	Association for the Advancement of Cost Engineers International
AAPMP	Advanced Acquisition and Project Management Perspectives
ACDP	Acquisition Career Development Program
ACO	Administering Contracting Officer
AMEM	Assistant Manager for Environmental Management
AMWTP	Advanced Mixed Waste Treatment Project
CAP	Corrective Action Plan
CBC	Consolidated Business Center
CBFO	Carlsbad Field Office
CD	Critical Decision
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CHCO	Chief Human Capital Officer
CIP	Career Intern Program
CRB	Certification and Review Board
D&D	Decontaminating and Decommissioning
DAS	Deputy Assistant Secretary
DAS/APM	Deputy Assistant Secretary for Acquisition and Project Management
DAU	Defense Acquisition University
DNFSB	Defense Nuclear Facilities Safety Board
ECO	Employee Concerns Officer
EDP	Executive Development Program
EH	Office of Environment, Safety and Health
EM	Office of Environmental Management
ESAP	Energy Student Achievement Program
ETTP	East Tennessee Technology Park
FEI	Federal Executive Institute
FPD	Federal Project Director
FR	Facility Representatives
FTCP	Federal Technical Capability Panel
FTE	Full-Time Equivalent
FY	Fiscal Year
HCMP	Human Capital Management Plan
HCS	Human Capital System
HQ	Headquarters
ICP	Idaho Cleanup Project
IFDP	Integrated Facility Disposition Project
INPO	Institute of Nuclear Power Operations
IP	Implementation Plan
IPT	Integrated Project Team
ISM	Integrated Safety Management
LDS	Leadership in Democratic Society
LLW	Low-level Waste
NELT	Nuclear Executive Leadership Training
NNSA	National Nuclear Security Administration
OCIO	Office of Chief Information Officer
OECM	Office of Engineering and Construction Management
OR	Oak Ridge
ORISE	Oak Ridge Institute of Science and Education
ORNL	Oak Ridge National Laboratory
ORP	Office of River Protection
PBS	Project Baseline Summaries
PCO	Procurement Contracting Officer
PD	Project Director

## Appendix D

PMA	President's Management Agenda
PMCDP	Project Management Career Development Program
PPPO	Portsmouth/Paducah Project Office
PSO	Program Secretarial Office
QA	Quality Assurance
QAPP	Quality Assurance Program Plan
RL	Richland Operations
SES	Senior Executive Service
SME	Subject Matter Expert
SNF	Spent Nuclear Fuel
SP	Staffing Plan
SPRU	Science Policy Research Unit
SRS	Savannah River Site
SSO	Safety System Oversight
STSM	Senior Technical Safety Manager
TQP	Technical Qualification Program
TRU	Transuranic
VERA	Voluntary Early Retirement Authority
VSIP	Voluntary Separation Incentive Plan
WIPP	Waste Isolation Pilot Plant
WTP	Waste Treatment and Immobilization Plant
WVDP	West Valley Demonstration Project