Department of Energy
Washington, DC 20585

MEMORANDUM FOR KAREN L. BOARDMAN
CHAIRPERSON
FEDERAL TECHNICAL CAPABILITY PANEL

FROM: MATTHEW B. MOURY FOR:
DEPUTY ASSISTANT SECRETARY FOR
SAFETY AND SECURITY PROGRAM
ENVIRONMENTAL MANAGEMENT

SUBJECT: Annual Workforce Analysis and Staffing Plan Report for Environmental Management

The Office of Environmental Management performed a technical workforce analysis per DOE O 426.1, Federal Technical Capability Order, and your memorandum of October 13 2011, "Annual Workforce Analysis and Staffing Plan Report of Calendar Year 2011." A summary report, using the template provided in your memorandum, is attached for Federal Technical Capability Panel (FTCP) review and incorporation into the FTCP Annual Report to the Secretary of Energy.

If you any questions, please contact me at (202) 586-5151.

cc: Jeannette Yarrington, HS-10
K. Picha, EM-21 (Acting)
J. Landmesser, EM-21
C. Bankins, EM-21

Annual Workforce Analysis and Staffing Plan Report
As of December 31, 2011
Environmental Management Headquarters

Section One: Current Mission(s) of the Organization and Potential Changes

The Office of Environmental Management (EM) Headquarters (HQ) mission is to provide high-level policy and direction, as well as oversight of risk reduction and cleanup of the environmental legacy of the nation's nuclear weapons program and government-sponsored nuclear energy research. The program is one of the largest and most diverse and technically complex environmental cleanup programs in the world, including responsibility for the cleanup of 107 sites across the country. Included in that responsibility is the need to safely disposition large volumes of nuclear wastes, safeguard materials that could be used in nuclear weapons, and deactivate and decommission facilities no longer needed to support the Department of Energy's (DOE) mission.

The types and magnitude of technical capabilities currently needed for safe operations include responsibility to oversee environmental cleanup of 1,549 nuclear and radiological facilities and 3,603 industrial facilities, as well as, new construction of major radiochemical facilities such as the Waste Treatment Plant at Hanford, the Depleted Uranium Hexafluoride facilities at Portsmouth/Paducah Project Office, Salt Waste Processing Facility at Savannah River Site, and the Sodium Bearing Waste Facility at the Idaho National Laboratory. Although EM HQ does not operate facilities directly, the organization has responsibility for certain review and approval functions that require in-depth technical knowledge and experience.

Section Two: Technical Staffing

EM HQ does not directly manage a fixed set of facilities. The responsibilities requiring technical staffing vary from year to year depending upon authorities delegated to field managers or retained at the HQ level, as well as, changes in project makeup requiring oversight. In most cases, the field element is expected to fully staff all oversight functions, but EM HQ performs its own independent oversight of facilities counted in the following table, per the requirements of DOE O 226.1B, Implementation of DOE Oversight Policy. Additionally, in early Fiscal Year 2009 EM established a Technical Authority function to provide review and guidance regarding project related actions that require DOE-EM corporate approval within the critical decision process.

Section Two – Site Characteristics Table

Number of Hazard Category 1, 2, or 3 Nuclear Facilities:

HC 1 N/A HC 2 N/A HC 3 N/A

Number of Radiological Facilities: 0

Number of High or Moderate Hazard Non-Nuclear Facilities: 0

Number of Low Hazard Non-Nuclear Facilities: 0

Number of Documented Safety Analyses: 0

Number of Safety Systems: 0

Number of Site Contractor FTEs: 0

Number of Federal Office FTEs: 345

(EM Headquarters does not operate facilities directly. Individual site characteristics are provided on separate reports submitted by field/site offices.)

Section 2 - Technical Staffing Summary Table

TECHNICAL CAPABILITY	For All Facilities		COMMENTS
	Number of FTEs Needed	Number of FTEs Onboard	
Senior Technical Safety Managers	33	31	
Safety System Oversight Personnel	0	0	
Facility Representatives	0	0	
Other Technical Capabilities:			
111Aviation Safety Manager	0	0	
Aviation Safety Officer	0	0	
Chemical Processing	1.5	1.5 *	
Civil/Structural Engineering		0	
Construction Mgmt	3	2	
Criticality Safety	1.25	1.25**	
Deactivation and Decommissioning	4	1	
Electrical Systems	1	1	
Emergency Management	4	3	
Environmental Compliance	1	1	
Environmental Restoration	5	5	
Facility Maintenance Mgmt	2	0	
Fire Protection Engineering	1	1	
Industrial Hygiene	1	0	
Instrumentation and Control	0	0	
Mechanical Systems	4	2	
Nuclear Explosive Safety	0	0	
Nuclear Safety Specialist	3.75	3.75**	
Occupational Safety	3	3	
Quality Assurance	11	8	
Radiation Protection	3.4	2.4*	
Safeguards and Security	14	11	
Safety Software Quality Assurance	3.1	3.1*	
Technical Program Manager	8	6	
Technical Training	1	1	
Transportation & Traffic Mgmt	8	8	
Waste Management	3	3	
Weapons QA	0	0	
Federal Project Directors	5	5	

*On Board FTE covers 50% Chemical Processing, 40% Radiation Protection, and 10% Safety Software Quality Assurance of FAQ
** On Board FTE covers 25% Criticality Safety and 75% Nuclear Safety Specialist of FAQ Notes:

Section Three: Current shortages and plans for filling them

EM Headquarters conducted a survey of senior program managers to assess the current on-board technical capabilities and shortages. The current shortages are identified in the following eleven areas: Two (2)- Senior Technical Safety Manager, One (1) – Construction Management, Three (3)- Deactivation and Decommissioning, One (1)- Emergency Management, Two (2)- Facility Maintenance Management, One (1) Industrial Hygienist, Two (2) Mechanical Systems, Three (3) Quality Assurance, One (1) Radiation Protection, Three (3) Safeguards and Security, and Two (2) Technical Program Manager.

EM is currently waiting for reorganization approval and will evaluate options to fill these needs after the reorganization is implemented.

Section Four: Projected shortage/surplus over next five years

With an average age exceeding 50 years, many workers are already eligible for or approaching retirement. Most of the technical experts are in this group, which could adversely impact the skill mix. EM HQs is currently undergoing a pending reorganization and given the anticipated budget environment over the next few years, there exists a need to eliminate some positions in both Headquarters and Field organizations. These reductions are expected to take place through annual attrition and with the implementation of a Voluntary Separation Incentive Payout (VISP) or the Voluntary Early Retirement Authority (VERA). This measure can also impact the staffing and retention of employees with necessary technical capabilities to meet missions of organization. For succession planning, EM continues to maximize internship opportunities which are creating a "pipeline" of mission critical and site/office specific skills to enter workforce in areas of need. Currently, the DOE- EM Florida International University (FIU) fellows program provides (at no cost to site/office) such an opportunity. EM's current contract acquisition strategy deviates from the traditional M&O concept to multiple smaller contractors is resulting in the need for expanded Federal technical oversight activity. As EM completes its cleanup mission, associated Federal workforce requirements will correspondingly decrease. EM's management challenge is to hire and retain capable Federal employees in a program that will experience decreasing federal resources.

Section Five: General comments or recommendations related to the Technical Staffing

None at this time.