Department of Energy
Washington, DC 20585

January 29, 2014

MEMORANDUM FOR KAREN L. BOARDMAN
CHAIRPERSON
FEDERAL TECHNICAL CAPABILITY PANEL

FROM: MATTHEW MOURY
DEPUTY ASSISTANT SECRETARY FOR
SAFETY, SECURITY, AND QUALITY PROGRAMS
ENVIRONMENTAL MANAGEMENT

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

The Office of Environmental Management performed a technical workforce analysis per Department of Energy Order 426.1, Federal Technical Capability Order, and your memorandum on October 11, 2013, "Annual Workforce Analysis and Staffing Plan Report for Calendar Year 2013." 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 have any questions, please contact me, at (202) 586-5151.

Attachment

cc: Jeannette Yarrington, HS-10
James Hutton, EM-40
Collette Bankins, EM-40
Todd Lapointe, EM-41

Annual Workforce Analysis and Staffing Plan Report
as of December 31, 2013
Environmental Management Headquarters

SECTION ONE: SITE MISSION(S), OUTLOOK, AND CHARACTERISTICS

The Office of Environmental Management (EM) Headquarters (HQ) mission is to provide high-level policy and direction, as well as oversight of the accelerated 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 ***1,491*** nuclear and radiological facilities and ***4,031*** 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, 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.

Site Characteristics

Number and Hazard Category (HC) (per DOE Standard 1027) of NUCLEAR Facilities:

HC1 N/A **HC2** N/A **HC3** N/A **Less than HC3** N/A

Number of Documented Safety Analyses: 0

Total Number of Safety Systems credited in Documented Safety Analyses: 0

Number of High or Moderate Hazard NON-NUCLEAR Facilities: 0

Number of Low Hazard NON-NUCLEAR Facilities: 0

Number of Site Contractor Full-time Employees (FTE) (by Program Office): 0

Number of Federal Office FTE (by Program Office): 0

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

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 Policy (P) 226.1B, *Department of Energy Oversight Policy*, dated 04-25-11. 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.

Technical Staffing Summary Table (see Notes below)

	For All Facilities[1]		
Technical Capability	Number of FTEs Needed[1]	Number of FTEs Onboard[1]	Comments
Senior Technical Safety Managers	33	31	
Safety System Oversight Personnel	0	0	
Facility Representatives	0	0	
Other Technical Capabilities:			
Aviation Safety Manager	0	0	
Aviation Safety Officer	0	0	
Chemical Processing	1	1	
Civil/Structural Engineering	0	0	
Confinement Ventilation and Process Gas Treatment	0	0	
Construction Management	3	2	
Criticality Safety	1.25	1.25*	
Deactivation & Decommissioning	4	1	
Electrical Systems	1	1	
Emergency Management	5	3	
Environmental Compliance	1	1	
Environmental Restoration	5	5	
Facility Maintenance Mgt.	2	0	
Fire Protection Engineering	1	1	
Industrial Hygiene	1	0	
Instrumentation & Control	0	0	
Mechanical Systems	4	2	
National Nuclear Security Administration Packaging Cert. Engineer	0	0	
Nuclear Explosive	0	0	
Nuclear Safety Specialist	3.75	3.75*	
Occupational Safety	3	3	
Quality Assurance	12	8	
Radiation Protection	3	2	
Safeguards & Security	11	10	
Safety Software QA	3	1	
Technical Program Manager	8	6	
Technical Training	1	1	
Transportation & Traffic Mgt.	8	8	
Waste Management	3	3	
Weapons Quality Assurance	0	0	
Federal Project Directors[2]	0	0	

*On Board FTE covers 25% Crticality Safety and 75% Nuclear Safety Specialist of Functional Area Qualification

Section Three: Current shortages and plans for filling them

A survey of senior EM HQ program managers was conducted to assess the current on-board technical capabilities and shortages. The shortages identified are in the following 11 areas: Two - Senior Technical Safety Manager, One - Construction Management, Three - Deactivation and Decommissioning, Two - Emergency Management, Two - Facility Maintenance Management, One - Industrial Hygienist, Two - Mechanical Systems, Four - Quality Assurance, One - Radiation Protection, One - Safeguards and Security, and Two - Technical Program Manager.

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. With possible budget reductions in EM over the next few years, there may exist a need to eliminate some positions in both HQ and field organizations. These reductions are expected to take place through annual attrition. This measure can also impact the staffing and retention of employees with necessary technical capabilities to meet mission of the organization. For succession planning, EM continues to explore internship opportunities which are creating a "pipeline" of mission critical and site/office specific skills to enter workforce in areas of need. 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.