



Department of Energy

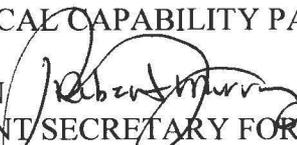
Washington, DC 20585

JAN 9 2016

MEMORANDUM FOR KAREN L. BOARDMAN
CHAIRPERSON
FEDERAL TECHNICAL CAPABILITY PANEL

FROM:

Per

JAMES A. HUTTON 
DEPUTY ASSISTANT SECRETARY FOR
SAFETY, SECURITY, AND QUALITY PROGRAMS
ENVIRONMENTAL MANAGEMENT

SUBJECT: Annual Workforce Analysis and Staffing Plan Report for
Environmental Management Calendar Year 2015

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 September 9, 2015, "Annual Workforce Analysis and Staffing Plan Report for Calendar Year 2015." 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 further questions, please contact me, at (202) 586-5151.

Attachment

cc: Jeannette Yarrington, AU-10
Monica Regalbutto, EM-1
Lori Largen, EM-1 DCOS
Mark Whitney, EM-2
Frank Marcinowski, EM-2.1 (Acting)
Greg Sosson, EM-40 ADAS
Collette Bankins, EM-40
Daniel Sigg, Acting, EM-41



Annual Workforce Analysis and Staffing Plan Report as of December 31, 2015.

Office of Environmental Management Headquarters

This is a template. Explanatory/example wording not in bold type should be deleted for the report.

SECTION ONE: SITE OR HQs 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 **1,447** nuclear and radiological facilities and **4,107** 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 (Sites ONLY)

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

HC1 _____ **HC2** _____ **HC3** _____ **Less than HC3** _____

Number of Documented Safety Analyses: _____

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

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

Number of Low Hazard NON-NUCLEAR Facilities: _____

Number of Site Contractor FTEs (by Program Office): _____

Number of Federal Office FTEs (by Program Office): _____

Sites accountable to multiple Headquarters Program Offices list FTEs by each Office, e.g. Total 22 FTEs (EM - 20, NE - 2).

SECTION TWO: TECHNICAL STAFFING

Complete the Technical Staffing Summary Table as follows for each of the technical capabilities for Defense Nuclear Facilities:

- Senior Technical Safety Manager (STSM) qualification needs are determined by the position in the organization rather than the FTE workload. For STSMs, enter the number of positions requiring STSM qualification and the number assigned as of December 2015.
- For Technical Capabilities other than STSM, enter the number of personnel in Full Time Equivalents (FTE) (e.g. 0.1 FTE) needed to support safe defense nuclear facility operations for your site or office. Enter the number of FTE personnel who are on board as of December 2015.
- STSM/Facility Representative (FR)/Safety System Oversight (SSO) personnel are generally required for all defense nuclear facilities. FRs are also used for other types of hazardous facilities. FR personnel are normally not assigned to partial FTE requirements.
- If an SSO is assigned as a partial FTE to both an SSO Technical Capability and as a non-SSO, include a comment noting the division of time. For example, a fire protection engineer assigned 0.5 FTE as a SSO and 0.5 FTE for other fire protection work could be included in the SSO total and also entered on the fire protection engineering competency as 0.5 FTE with a comment that the fire protection engineer also serves 0.5 FTE as a SSO. The objective is to avoid double counting and to be clear if a fully utilized specialist is unavailable for other assignments.
- FR and SSO staffing analysis worksheets and examples are available by request.
- The same person may be included in multiple capabilities as a fraction of an FTE in each capability. However, this requires completing multiple FAQs.
- If other types of experts in the list are not needed at the site, show zero in the Number of FTEs Needed columns. Do not delete the capability from the list. Only list technical capabilities with an approved Functional Area Qualification Standard (FAQ). Technical capability needs that are not covered by a FAQ should be noted in Section 5 for potential development of new FAQs.
- Collateral duties assigned should be considered in completing the workforce analysis.
- Use the comment column to identify compensatory measures or other support.
- Planned near term departures may be taken into account by reducing the number available and noting the departure date.

Technical Staffing Summary Table (see Notes below)

Technical Capability	For All Facilities ¹		Comments
	Number of FTEs Needed ¹	Number of FTEs Onboard ¹	
Senior Technical Safety Managers	15	15	
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	2	2	
Civil/Structural Engineering	0	0	
Confinement Ventilation and Process Gas Treatment	0	0	
Construction Management	0	0	
Criticality Safety	1	1	
Deactivation & Decommissioning	1	1	
Electrical Systems/Safety Oversight	0	0	
Emergency Management	5	5	

Environmental Compliance	2	1	
Environmental Restoration	3	0	
Facility Maintenance Mgt	0	0	
Fire Protection Engineering	1	0	
Industrial Hygiene	0	0	
Instrumentation & Control	0	0	
Mechanical Systems	1	1	
NNSA Packaging Cert. Engineer	0	0	
Nuclear Explosive Safety Study	0	0	
Nuclear Safety Specialist	2	2	
Occupational Safety	3	3	
Quality Assurance	7	7	
Radiation Protection	2	2	
Safeguards & Security	12	11	
Safety Software QA	6	3	
Technical Program Manager	6	6	
Technical Training	0	0	
Transportation & Traffic Mgt	8	8	
Waste Management	17	17	
Weapons QA	0	0	
Federal Project Directors ²	0	0	

Notes:

1. These columns identify the number of FTEs needed to perform the Federal Safety Assurance function for your site or office Defense Nuclear Facilities based on potential facility and operational hazards.
2. Federal Project Managers/Directors are not qualified via the Technical Qualification Program, but are qualified in accordance with the Project Management Career Development Program

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 4 areas: One– Security Specialist, Two- Environmental Compliance, Three- Environmental Restoration, One- Fire Protection and Three- Safety Software QA.

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 technical experts are in this age group, which could adversely impact the skill mix in the out years. With possible budget reductions in EM over the next few years, there may exist a need to reduce 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 current employees with the necessary technical capabilities required to meet the 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 the workforce in the greatest areas of need. EM is also pursuing knowledge management opportunities for the Department. EM's management challenge is to hire and retain capable Federal employees in a program experiencing possible decreasing Federal resources.

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

None at this time.