

United States Government

Department of Energy

# Memorandum

Carlsbad Field Office  
Carlsbad, New Mexico 88221

DATE: JAN 15 2015

REPLY TO  
ATTN OF: CBFO:OOO:JWM:SC:15-1201:UFC 3410.00

SUBJECT: 2014 CBFO Annual Workforce Analysis and Staffing Plan

TO: Karen L. Boardman, Chairperson, Federal Technical Capability Panel (HS-70)

The Carlsbad Field Office (CBFO) has updated the CBFO Annual Workforce Analysis and Staffing Plan as of December 31, 2014. The attachment to this Memorandum provides the updated CBFO Workforce Analysis and Staffing information on the Federal Technical Capability Program Annual Workforce Analysis and Staffing Report template.

If you have any questions regarding this matter, please contact Mr. Wes Mouser at (575) 234-8104 or via cellphone at (575) 725-8174.



Jose R. Franco, Manager  
Carlsbad Field Office

## Attachment

cc: w/attachment  
J. Yarrington, HS-10 \*ED  
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\*ED denotes electronic distribution

# Annual Workforce Analysis and Staffing Plan Report (As of 12/31/14)

## Reporting Office: CARLSBAD FIELD OFFICE

*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

**1. Provide several bullets that frame the types and magnitude of technical capabilities currently needed for safe operations in your sites or Program hazardous facilities or activities (non-nuclear and nuclear facilities including radiological facilities).**

- *The WIPP mission is established by Public Law 102-579 “The Waste Isolation Pilot Plant Land Withdrawal Act”. The Carlsbad Field Office (CBFO) is responsible for the safe, compliant, and cost effective implementation of the WIPP mission and for the oversight of characterization, certification, transportation (at DOE sites and across the nation) and permanent geological disposal of Transuranic (TRU) and mixed-TRU waste in the WIPP underground. The CBFO is also responsible for the management of the National TRU Program. Because of the national responsibility, CBFO regularly interfaces with numerous DOE sites (i.e., NNSA, Office of Science, National Laboratories, etc.) in regards to TRU waste risk reduction, cleanup and disposition. The CBFO also regularly interfaces with the Defense Nuclear Facilities Safety Board, US Environmental Protection Agency (EPA) - Office of Radiation and Indoor Air, US EPA Region 6, US Nuclear Regulatory Commission, numerous State Transportation Agencies, US Department of Transportation, US Mine Safety and Health Administration (HQ, Regional and Local), numerous State of New Mexico agencies, US Bureau of Land Management and DOE sites (such as but not limited to Richland, Office of River Protection, Idaho National Laboratory, Los Alamos National Laboratories, Argonne National Laboratory, Savannah River Site, Oak Ridge National Laboratory, etc.). The WIPP facility is just one facet of the CBFO responsibility for the National TRU Program.*
- *The WIPP site is divided into surface facilities, shafts and subsurface structures designed for one major activity; to receive, handle and permanently dispose of TRU waste. The underground waste disposal area is located at a depth of 2,150 feet below land surface. For determination of Hazard Categorization, the WIPP facility is a single facility segment.*
  - *There is one Documented Safety Analysis for the WIPP facility. WIPP is currently in the recovery phase from two incidents that occurred in February 2014 and a majority of the recovery work activities is being conducted under the auspices of Evaluation of the Safety of the Situation (ESS), Nuclear Safety documentation, to recover the underground drifts for habitability, mine stability, radiological characterization, decontamination, and panel closure and room closure.*
  - *The WIPP facility is a single facility classified as a DOE Nuclear Hazard Category 2, nonreactor nuclear facility according to DOE-STD-1027-92. WIPP facility is a Chemical Hazard Category Low facility.*
- *WIPP suspended TRU waste disposal operations on February 5, 2014, following a fire involving an underground salt haul truck. Nine days later, on February 14, 2014, a radiological event occurred underground, contaminating a portion of the mine primarily along the ventilation path from the location of the incident, releasing a small amount of contamination into the environment. Since February, WIPP has developed a Recovery Plan with a schedule of activities focused on safely returning WIPP to operational status.*

**2. Describe any potential or probable changes to the mission that may significantly affect technical staffing needs.**

- *The WIPP Recovery Plan provides a safe and compliant approach to resuming operations at the WIPP, the repository for disposal of the nation's defense transuranic (TRU) waste. The U.S. Department of Energy (DOE) is committed to resuming operations by the first quarter of calendar year 2016, and the Recovery Plan outlines the Department's approach to meet that schedule while prioritizing safety, health, and environmental protection.*
- *The WIPP is implementing recovery actions with a focus on commencing waste emplacement operations in the first quarter of calendar year 2016. Many of the Recovery activities underground are being performed under ESSs and Work Control Documents with Radiological Work Permits. Consistent with the Recovery Plan the WIPP underground will be systematically made habitable for safe operations and protective of workers with resumption of critical mine safety and maintenance operations. Operations will include simultaneous activities in contaminated and uncontaminated sections of the mine. Ventilation will be increased in phases back to its pre-incident airflow capacity, the mine will be surveyed and made habitable for workers, and the workforce will be retrained for contaminated operations and cross-trained for recovery activities.*
- *The mission of WIPP will not change, however, some of the underground Recovery activities in a portion of the underground disposal area and some of the TRU waste disposal operations after the restart of operations will be conducted where there is radiological contamination. Therefore, there is a new need for technical staff to be able to perform oversight activities using the appropriate PPE (e.g., purified air powered respirators, etc.) in the radiological contamination area and there may be a need to increase the number of Federal radiologic protection technical staff.*
- *Summary of Recovery activities includes significant effort to: (1) improve and update the Safety Management Programs (e.g., nuclear safety, fire protection, radiological protection, and emergency management), (2) revise and update documentation, procedures, and training, (3) revise the Documented Safety Analysis/Technical Safety Requirements, (4) address mine stability and habitability (e.g., radiological characterization, posting of radiological zones, decontamination, operational checks of mine safety equipment, replacing damaged equipment, fire loading reduction, cleaning, trash removal, and electrical system safe restart, etc.) and (5) to improve and increase the underground ventilation capacity. These improvements and updates will be validated in accordance with Departmental directives through the conduct of Operational Readiness Reviews (ORR) at the contractor and federal levels.*
- *CBFO has revised the Organization and added additional FTE's to support improved oversight and program and contract management through the recovery period, during the ORR and for future improved mission implementation.*

**Site Characteristics (Sites ONLY)**

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

HC1 \_\_\_\_\_ HC2 1 HC3 \_\_\_\_\_ Less than HC3 \_\_\_\_\_

**Number of Documented Safety Analyses:** 1

**Total Number of Safety Systems credited in Documented Safety Analyses:** 3 Safety Class, 7 Safety Significant SSCs (however the DSA is being revised with a finalization date in early to mid-calendar year 2015 and there will be changes in the safety systems)

**Number of High or Moderate Hazard NON-NUCLEAR Facilities:** None

**Number of Low Hazard NON-NUCLEAR Facilities:** None

**Number of Site Contractor FTEs (by Program Office):** Approximately 710 FTEs for the WIPP site

**Number of Federal Office FTEs (by Program Office):** 70 FTEs (50 on board as of 12/31/14)

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

**Technical Staffing Summary Table (see Notes below)**

| Technical Capability                              | For All Facilities <sup>1</sup>    |                                     | Comments   |
|---|------------------------------------|-------------------------------------|--|
|   | Number of FTEs Needed <sup>1</sup> | Number of FTEs Onboard <sup>1</sup> |  |
| Senior Technical Safety Managers                  | 10                                 | 6                                   | Reorganization identified 10 positions that require STSM qualification.  |
| Safety System Oversight Personnel                 | 6                                  | 5                                   | Six positions identified on Organization Chart to perform 0.5 FTE SSO duties. Four positions SSO qualified; one position in qualification for SSO, one position vacant. Reorganization lists 6 SSO positions in the Facility Engineering Division. Confinement Ventilation SSO position is vacant. |
| Facility Representatives                          | 4                                  | 1                                   | FR support is provided by FRs on detail to WIPP from other DOE sites.  |
| Other Technical Capabilities:                     |                                    |                                     |  |
| Aviation Safety Manager                           | 0                                  | 0                                   |  |
| Aviation Safety Officer                           | 0                                  | 0                                   |  |
| Chemical Processing                               | 0                                  | 0                                   |  |
| Civil/Structural Engineering                      | 0                                  | 0                                   |  |
| Confinement Ventilation and Process Gas Treatment | 1                                  | 1                                   | New CBFO position, Confinement Ventilation SSO – vacant. Partial support provided by CBFO Facility Systems SSO and Ventilation engineer(s) from other DOE sites.   |
| Construction Management                           | 0                                  | 0                                   |  |
| Criticality Safety                                | 0                                  | 0                                   |  |
| Deactivation & Decommissioning                    | 0                                  | 0                                   |  |
| Electrical Systems/Safety Oversight               | 1                                  | 0.5                                 | 0.5 FTE Electrical Systems and 0.5 FTE SSO duties.   |

|  |    |     |   |
|--|----|-----|---|
| Emergency Management                   | 1  | 1   | Emergency Management position filled November 2014  |
| Environmental Compliance               | 1  | 1*  | CBFO filled the Site Regulatory Specialist position during calendar year 2014. *Actual report date after 12/31/14.  |
| Environmental Restoration              | 0  | 0   |   |
| Facility Maintenance Mgt               | 1  | 0.5 | 0.5 FTE Facility Maintenance and 0.5 FTE SSO duties.  |
| Fire Protection Engineering            | 1  | 1   | 0.5 FTE Fire Protection Engineering and 0.5 FTE SSO duties.   |
| Industrial Hygiene                     | 1  | 0.5 | New Industrial Hygiene Specialist position – vacant. CBFO Safety Engineer provides about 0.5 FTE support. Additional support, when needed, provided by technical staff from other DOE sites.                                      |
| Instrumentation & Control              | 0  | 0   |   |
| Mechanical Systems                     | 1  | 0.5 | 0.5 FTE Mechanical Systems and 0.5 FTE SSO duties.  |
| NNSA Packaging Cert. Engineer          | 0  | 0   |   |
| Nuclear Explosive Safety Study         | 0  | 0   |   |
| Nuclear Safety Specialist              | 2  | 1   | New NSS position - vacant. One NSS position filled. Additional NSS support is provided by NSS from other DOE sites  |
| Occupational Safety                    | 1  | 0.5 | Safety Engineer (0.5 FTE). Additional support, when needed, provided by technical staff from other DOE sites.   |
| Quality Assurance                      | 3  | 2   | 2.0 FTEs. Both candidates qualified. New Quality Improvement Specialist position – Vacant.  |
| Radiation Protection                   | 2  | 1   | New Radiological Protection Specialist position – Vacant. Health Physics position filled. Additional radiological support is provided by HP/Rad engineers from other DOE sites.   |
| Safeguards & Security                  | 1* | 1   | *New Assistant Manager hired and working with CBFO Manager and Deputy Manager on evaluating the need for this position to be placed in the CBFO TQP program.  |
| Safety Software QA                     | 1  | 0   | Software QA Specialist position – Vacant. Support provided by technical staff from other DOE sites and /or Technical Assistance Contractor.   |
| Technical Program Manager              | 1  | 0   | New Technical Qualification and Training Specialist position - Vacant. Matrix support is currently being provided by CBFO Deputy Manager and Assistant Manager of Office of Operations Oversight until vacant position is filled. |
| Technical Training                     | 1  | 0.5 | 0.5 FTE TQP Technical Training. Performs collateral duties for CBFO.  |
| Transportation & Traffic Mgt           | 0  | 0   |   |
| Waste Management                       | 1  | 0.5 | 0.5 FTE Waste Management and 0.5 FTE SSO duties.  |
| Weapons QA                             | 0  | 0   |   |
| Federal Project Directors <sup>2</sup> | 2  | 3   |   |

## 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

*In the past calendar year, CBFO went through a major reorganization and new positions were identified and posted. Several vacant positions that were open for a long period of time were filled (Site Regulator Specialist, Emergency Management) and critical Director positions were also filled (e.g., (Office of Business, Office of Quality Assurance). CBFO has hired a WIPP Program Manager, a Federal Project Director, Assistant Manager for Office of Operations Oversight, and Assistant Manager for Office of Program Support and a Contractor Specialist. Several other vacancies are currently posted and/or interviews are being conducted and/or offers are being made.*

*High Priority positions to be filled near term include Facility Representative(s), Division Directors, Confinement Ventilation SSO, Nuclear Safety Senior Technical Advisor and Nuclear Safety Specialist.*

*Medium priority positions to be filled include QA Specialist, Contract Specialist and Project Controls. CBFO FTE's were increased with the reorganization from 54 to 70.*

*CBFO currently relies on technical support (e.g., Facility Representatives, Work Control, Ventilation Engineers, Health Physicists/Radiological, Nuclear Safety, etc.) from other DOE sites to assist until vacant positions are filled and major recovery activities have begun to stabilize. CBFO assigns the technical assistance contractor to perform audits and/or surveillances and limited scope oversight evaluations and support technical areas (e.g., Quality Assurance, Fire Protection, Nuclear Safety, etc.).*

#### **Section Four: Projected shortage/surplus over next five years**

*The CBFO Federal Workforce is aging and CBFO has historically had and continues to have challenges keeping and recruiting staff. Therefore, over the next five years there will likely be shortages to the CBFO Federal Workforce due to an aging workforce (e.g., retirement, early retirement, and/or voluntary separation incentive program), normal attrition and difficulty in recruiting and retaining technical personnel in a remote location. Currently southeast New Mexico and west Texas is experiencing a human resource demand to meet the numerous and lucrative oil and gas employment opportunities which is impacting recruitment and retention of technical personnel.*

*The numbers below are estimates and approximately 6 of the possible vacancies in the next 2 years may be positions in the CBFO TQP.*

- *CBFO TQP Positions Currently Vacant = 8*
- *CBFO TQP Possible Vacancies Next 6 months to 2 years - approximately 8*

*The CBFO Federal Workforce will be entirely focused on recovery activities that are projected to last until first quart of calendar year 2016 when the WIPP site is planning to conduct an ORR to resume TRU waste disposal operations. During the recovery effort there will be a continuing need for technical support from other DOE sites to augment the CBFO technical staffing needs associated with Facility Representatives, Nuclear Safety Specialists, Work Control, Radiological Engineers/HPs, and ventilation engineers. As the recovery efforts/activities become more predictable and stabilized the external DOE support will decrease and then the challenge will be to retain current technical staff, recruit and fill new vacancies and replace vacancies due to attrition and retirement.*

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

*There are no major changes anticipated to the WIPP mission over the next five years therefore no additional Functional Area Qualifications are expected to be needed at this time. If there are changes to the WIPP mission and/or Organizational alignments/structure, or FTEs, CBFO will evaluate the need for additional/reduced Functional Area Qualifications.*

*The ever-increasing concern over the federal FTEs, the budget, continuing resolutions and reduced program direction continue to represent significant challenges to keeping, incentivizing, and recruiting technical and non-technical staff at CBFO. CBFO has consistently experienced challenges recruiting and retaining qualified individuals in all categories (nontechnical/technical) because of, but not limited to, the following:*

- a. *Remote location*
- b. *Local employment competition from the numerous oil and gas employment opportunities*
- c. *Limited Air Service*
- d. *Limited relocation benefits (e.g., guaranteed home buyout program, etc.)*
- e. *High housing costs*
- f. *Lack of university system permitting 4 year technical degrees within 1 hour commute*
- g. *Limited Medical Specialists and consistent quality medical services locally*