

memorandum

DATE: FEB -9 2012

REPLY TO:
ATTN OF: EMCBC: BOYD

SUBJECT: **ANNUAL WORKFORCE ANALYSIS AND STAFFING PLAN REPORTS FOR CALENDAR YEAR 2011**

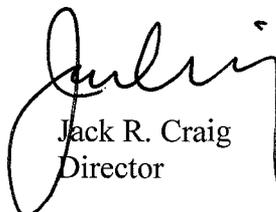
TO: Karen Boardman, Chairperson, Federal Technical Capability Panel

EMCBC-00283-12

The Environmental Management Consolidated Business Center (EMCBC) does not have a fixed set of facilities. The responsibilities requiring technical staffing vary from year to year depending upon supported project activities. The types and magnitude of the EMCBC technical capabilities currently needed for safe operations is dictated by the responsibility to provide surveillance and maintenance activities, support and oversee environmental cleanup, and transition of facilities at the Brookhaven National Laboratory (BNL); Grand Junction/Moab UMTRA Project; Separations Process Research Unit (SPRU); Energy Technology Engineering Center (ETEC); and the West Valley Demonstration Project. In accordance with DOE Order 426.1, Change 1, Federal Technical Capability and the guidance provided, the EMCBC performed a comprehensive annual workforce analysis of the EMCBC, BNL, Grand Junction/MOAB UMTRA Project, SPRU, and ETEC and identified the technical capabilities and positions needed to ensure safe operations of EM projects and related operational hazards. Technical services and support for all projects are provided by the EMCBC on an as needed basis.

Attached you will find the Annual Workforce Analysis and Staffing Plan reports as of December 31, 2011 for the EMCBC, BNL, Grand Junction/MOAB UMTRA Project, SPRU, and ETEC. The West Valley Demonstration Project submitted their information separately and is not included in this submittal.

If further information is needed on this matter, please contact T.J. Jackson at 513-246-0077.



Jack R. Craig
Director

Attachments: As Stated

cc electronically w/attachments:

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**Annual Workforce Analysis and Staffing Plan Report
As of December 31, 2011
Reporting Office: EM Consolidated Business Center**

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

The EM Consolidated Business Center (EMCBC) provides the U.S. Department of Energy's Office of Environmental Management with a full range of business support services using a strategic model similar to that used by other DOE field sites. The EMCBC also provides Technical services; this support resides in the newly reorganized Office of Technical Support and Asset Management (OTSAM). Attributes of the business model include the following: (1) Stable technical business support for a variety of customers with differing project mission requirements and different support priorities; (2) Combined use of federal employees and support service contractors (as required) to support customer needs, and (3) Optimization of full-time equivalents between the EMCBC, EM-52, and the Small/Closure Sites.

The types and magnitude of the EMCBC technical capabilities currently needed for safe operations is dictated by the responsibility to support and oversee environmental cleanup and transition of facilities at the Brookhaven National Laboratory (BNL); Grand Junction/Moab UMTRA Project; Separations Process Research Unit (SPRU); and the West Valley Demonstration Project (WVDP). The EMCBC also provides direct line management oversight of OTSAM staff at the Denver Federal Center (DFC). The DFC provides service and support to the DOE Office of Classification, the EM Office of Safeguards, Security and Emergency Management, National laboratories, and other DOE customers.

As of the end of FY 11 and at present, the EMCBC Cadre and other OTSAM staff assists the EM Office of Site Support and Small Projects (OSS&SP) in providing DOE oversight responsibility to Small Sites. The OSS&SP is currently responsible for effectively implementing EM line management responsibilities, obligations, and activities at EM sites (MOAB/WVDP), EM Projects on other Program Office sites (BNL/SPRU/SLAC) and DOE Projects on commercial sites (ETEC/SLAC). OSS&SP assists by increasing management accountability at those sites; transition of those projects to the responsible landlord organizations or to the Office of Legacy Management upon completion of EM activities; and for working with the other EM offices to expedite issues.

In FY 2012, a proposed EM reorganization is planned. Discussion is under way with EM that will require the EMCBC to assume a line management responsibility for Small and Closure Projects. For FY 2012, the EMCBC is currently in the planning stages of identifying the skills mix, resources, plans and procedures needed to perform line management tasks supporting small sites. Tasks proposed include Delegation of Safety Authorities and Technical Qualification Program Management. The EMCBC will likely assume line management responsibility over small and closure projects once the processes, procedures and proper delegations are issued to EM by the EMCBC. However, for the remainder of FY2012, the small sites and facilities will continue to be under the day to day line management authority of onsite Federal Project Directors under the delegations authorized by EM. The EMCBC responsibilities requiring technical staffing vary from year to year depending upon supported project activities. The EMCBC FY2012 Staffing Analysis assumes increased support to Small Sites and Projects and also additional support to large sites.

Section Two: Technical Staffing

Project Specific FTCP Annual Staffing Plans have been developed by most Small Site Projects and many former Cadre employees have been assigned directly to those Projects or to the Small Sites Projects Office within EM. The Projects with staffing plans include the GJ/Moab, SPRU and WVDP Projects. In FY11, several FTE were transferred from EMCBC control to EM. Staff transferred support the ETEC and SLAC Projects in California. Also in FY11, the Oakland Projects Office was closed and select FTE of that office were moved to EM control.

Currently, ten EMCBC Cadre employees are onboard, of which seven are physically located and working on-site at Projects or Headquarters EM Offices. The seven Cadre fill positions as technical representatives such as STSM and Facility Representatives. The 3 remaining Cadre employees (all STSM's) support Small Projects in a TDY status and include service at BNL, SPRU and WVDP.

The EMCBC OTSAM has five STSM FTE positions required as of FY11. A sixth STSM position will be required to fill a Supervisory position within OTSAM. The position has been announced in FY12, but is not yet filled.

The 26.1 FTE Staffing figure identified in Section 2 includes analysis performed per Attachment 2, Annual Workforce Analysis and Staffing Plan Report. The Analysis has been reviewed by the STSM over the OTSAM who is also the EMCBC FTCP Agent. The EMCBC and the Small Sites we support currently perform work at or below Hazard Category 3 Nuclear Facilities. However, assumptions were made based on the increased level of service and support planned or provided to the EM complex in areas of Safety Delegations of Authority, Nuclear Quality Assurance, Operations Oversight, Integrated Safety Management Support, Operational Readiness Review, HLW QA Audit support and Technical Qualification Program Management. For this reason, FY 2012 numbers appear significantly higher than previous reports.

Currently, Technical backgrounds within OTSAM include quality assurance, emergency management, radiation protection, transportation, environmental compliance, environmental restoration, industrial hygiene, waste management, regulatory compliance, occupational safety, safeguards and security, and project management.

OTSAM is currently reviewing Position Descriptions using this analysis to determine if TQP requirements need to be added to PD's. Other forms of resourcing technical needs will include Corporate reach-back to EM to qualified Federal FTE and contract support. OTSAM is also reviewing (and revising as necessary), program plans and procedures to document our processes.

Section Two – Site Characteristics Table

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

HC 1 0

HC 2 0

HC 3 0

Number of Radiological Facilities: SPRU (4), BNL(2) and MOAB (1)

Number of High or Moderate Hazard Non-Nuclear Facilities:

Number of Low Hazard Non-Nuclear Facilities: 0

Number of Documented Safety Analyses: 0

Number of Safety Systems: 0 Number of Site Contractor FTEs: 4

NOTE – For FY 2012, the EMCBC has added the facilities associated with Small Site Projects except the West Valley Demonstration Project to demonstrate known workload activities associated with Small Site Delegations of Authority. Additional facility specific based planning assumptions to support the EM Complex are not included in this analysis, however support for HLW QA, ORR's, ISMS and other safety related support was assumed.

Number of Federal Office FTEs: EMCBC is currently authorized 173 FTE and has on board as of 1/1/2012 170 FTE. Currently, only 11 FTE positions require Technical Qualification in accordance with DOE 426.1. 6 positions are assigned to the EMCBC (All STSM/FPD) with 4 EMCBC Cadre positions serving at SPRU (1 FR- 3 STMS) and 1 at WVDP (STSM). Voluntary qualifications with multiple TQP functional standards are completed, under way or being considered per Section 2, Technical Staffing Summary.

Section 2 - Technical Staffing Summary Table

TECHNICAL CAPABILITY	For All Facilities		Comments
	Number of FTEs Needed	Number of FTEs Onboard	
Senior Technical Safety Managers	6	5	Mandatory participation in the TQP. The Assistant Director of the Office of Technical Support and Asset Management (OTSAM) requalified in December 2009. Two Cadre employees requalified in 2010. The remaining three will complete qualification this fiscal year. New STSM being hired in OTSAM.
Safety System Oversight Personnel	0	0	
Facility Representatives	1.5	1	
Other Technical Capabilities:	-	-	
Aviation Safety Manager	0	0	
Aviation Safety Officer	0	0	
Chemical Processing	0	0	
Civil/Structural Engineering	0.25	0	Will obtain this expertise from a Support Services Contractor.
Construction Mgmt	0.25	0	Will obtain this expertise from a Support Services Contractor.
Criticality Safety	0.1	0	Will obtain this expertise from a Support Services Contractor.
Deactivation and Decommissioning	0.5	0.5	Voluntary participation in the TQP. One EMCBC employee is currently enrolled in the TQP for the D&D FAQS.
Electrical Systems	0	0	
Emergency Management	1	1	One employee enrolled in the TQP and qualified in 2011.
Environmental Compliance	1	1	Voluntary participation in the TQP.
Environmental Restoration	1	1	Voluntary participation in the TQP.
Facility Maintenance Mgmt	0.1	0	Will obtain this expertise from a Support Services Contractor.
Fire Protection Engineering	0.1	0	Will obtain this expertise from a Support Services Contractor.
Industrial Hygiene	1	1	Voluntary participation in the TQP.
Instrumentation and Control	0	0	
Mechanical Systems	0	0	Will obtain this expertise from a Support Services Contractor.
Nuclear Explosive Safety	0	0	
Nuclear Safety Specialist	0.1	0	Will obtain this expertise from a Support Services Contractor.
Occupational Safety	1	1	Voluntary participation in the TQP.
Quality Assurance	2	2	Voluntary Participation in the TQP.
Radiation Protection	0.5	1	Voluntary participation in the TQP.
Safeguards and Security	4	4	Voluntary Participation in the TQP. 2 EMCBC employees located in Denver, CO; supports Building 55 declassification work. 2 EMCBC employees located in Cincinnati, Ohio supports the EMCBC and OSS&SP with personnel security.
Safety Software Quality Assurance	0.1	0.1	Voluntary participation in the TQP.
Technical Program Manager	3	2	Voluntary participation in the TQP.
Technical Training	1	0.5	Voluntary participation in the TQP.
Transportation & Traffic Mgmt	0.5	0.5	Voluntary participation in the TQP
Waste Management	1	1	Voluntary participation in the TQP
TOTAL:	26.1	22.1	Voluntary participation in the TQP.
Fed. Project Directors - Small Sites	4.75	4.75	FPDs are enrolled in the Project Management Career Development Program which is separate from the TQP.

Section Three: Current shortages and plans for filling them

There are no current shortages at the EMCBC, except for those reported in the staffing plans of the supported sites. Temporary assignments, details and support contractors will continue to be used to fulfill OSS&SP short-term needs.

Section Four: Projected shortage/surplus over next five years

The EM Closure Cadre program has experienced significant turnover since the EMCBC began in 2004. Much of the turnover was the result of positions ending due to closure, particularly at Rocky Flats, Fernald, and Mound sites, and American Recovery and Reinvestment Act work at various sites throughout the DOE complex. All new hires have been very well qualified. Because of signed mobility agreements, these Cadre can be relocated to other sites as needs change among EMCBC supported sites. To date, the most critical jobs to fill have been with DOE Facility Representatives. As the pool of skilled nuclear industry technical experts declines, many vacancies in the DOE complex are often filled at the expense of other DOE sites. However, as EM completes its cleanup mission, associated Federal workforce requirements will correspondingly decrease.

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

None at this time.

**Annual Workforce Analysis and Staffing Plan Report
As of December 31, 2011**

Reporting Office: Separations Process Research Unit (SPRU) Field Office

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

The Separations Process Research Unit (SPRU) is an inactive pilot plant near Schenectady, New York, used to research and develop the chemical separations process to extract plutonium from irradiated fuel. The SPRU mission was completed in 1953, at which time the Knolls Atomic Power Laboratory (KAPL), on which SPRU is located, became the SPRU site caretaker. The SPRU site was transferred from Naval Reactors (NR) to Environmental Management (EM) in 1999, and a mission need, CD-0, was approved in April 2006. The CD-1 for the project was completed in July 2007, and CD-2/3 was approved in August 2008. The mission of the SPRU Field office is as follows:

- Decontamination and decommissioning of two major nuclear facilities;
- Remediation of approximately 30 acres of soil contaminated with radionuclides and, to a lesser extent, chemical constituents;
- Proper management, shipment and disposal of waste generated by the project, potentially including transuranic (TRU) waste; and,
- Return of the SPRU site to NR for continued beneficial use.

EM work at SPRU is scheduled for completion in September 2016 (CD-4). No changes to this mission scope are currently forecast. NR may elect to identify additional facilities or areas at KAPL for transfer to EM for disposition. Such transfers are subject to approval through the DOE critical decision process pursuant to DOE O 413.3, and the identification of project funding.

Section Two: Technical Staffing

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

HC 1 0 HC 2 0 HC 3 0

Number of Radiological Facilities: 4

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 Systems²: 0

Number of Contractor FTEs: 120

Number of Federal Office FTEs: 9 (includes 1 EM-23 and 4 EMCBC Cadre Employees)

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TECHNICAL CAPABILITY	For All Hazardous Facilities		Comments
	Number of FTEs Needed	Number of FTEs Onboard	
Senior Technical Safety Managers	1	1	Federal Project Director completed STSM qualification in 2009
Safety Systems Oversight Personnel	0	0	No Safety Systems have been credited in DSA.
Facility Representatives	2	2	This technical capability is provided by a qualified Facility Representative from the EMCBC cadre, a FR in training, and support contractors.
Other Technical Capabilities:			
Aviation Safety Manager	0	0	No forecasted need at SPRU.
Aviation Safety Officer	0	0	No forecasted need at SPRU.
Chemical Processing	0.25	0.25	The Federal Project Director and Deputy Federal Project Director are degreed in chemical engineering and perform this technical capability.
Civil/Structural Engineering	0.25	0.10	The Facility Representative is degreed in Civil Engineering and has this expertise.
Construction Mgmt	0.25	0.15	The Facility Representative is degreed in Civil Engineering and has this expertise.
Criticality Safety	0	0	No forecast need at SPRU; criticality has been analyzed and deemed not credible.
Deactivation and Decommissioning	1	0.25	The SPRU Federal Project Director has considerable D&D experience.
Electrical Systems	0.25	0.25	This technical capability is covered by the Facility Representative position as well as the ES&H Program Manager
Emergency Management	0.25	0.25	This technical capability is covered by the ES&H Program Manager with additional support provided by the EMCBC Office of Technical Support and Asset Management.
Environmental Compliance	1	1	This technical capability is provided by an EMCBC cadre.
Environmental Restoration	1	1	This technical capability is provided by an EMCBC cadre.
Facility Maintenance Mgmt	0.25	0	This technical capability is provided by an EMCBC cadre.
Fire Protection Engineering	0.10	0	Technical assistance in this area will be sought from the EMCBC Office of Technical Support and Asset Management or support services contractor as needed.
Industrial Hygiene	0.5	0.25	This technical capability is provided by the ES&H Program Manager.
Instrumentation and Control	0.25	0	For the purposes of SPRU, no additional need is specified because this is adequately provided by a FR.
Mechanical Systems	0.25	0	This technical capability is provided by an EMCBC cadre.
Nuclear Explosive Safety	0	0	No forecasted need at SPRU.
Nuclear Safety Specialist	0.25	0.25	This technical capability is performed by an EM-23 employee. Support service contractor provide additional ongoing expertise as needed.

Occupational Safety	0.50	0.50	This technical capability is provided by the ES&H Program Manager and the Facility Representative. SPRU has added expertise in this area from a full-time support services contractor.
Quality Assurance	0.10	0	Technical assistance in this area will be sought from the EMCBC Office of Technical Support and Asset Management as needed.
Radiation Protection	0.50	0.50	This technical capability is currently being provided by the ES&H Program Manager.
Safeguards and Security	0.25	0.25	This technical capability is provided by an EMCBC cadre.
Safety Software Quality Assurance	0	0	No forecasted need at SPRU.
Technical Program Manager	1	1	His discipline will be provided by the Deputy FPD.
Technical Training	0	0	This technical capability is provided by the EMCBC.
Transportation & Traffic Mgmt	0.25	0	This technical capability is being covered by the Regulatory and Waste Program Manager. Additional support is provided by DOE-HQ staff.
Waste Management	0.75	0.25	The Regulatory and Waste Program Manager is fulfilling this function, with assistance from EM-HQ as needed. Support also is provided by the EMCBC Office of Technical Support and Asset Management as requested.
TOTALS	12.3	7	The number of FTEs on-board is approximately equal to the current work load. Additional resources previously identified in the areas of waste management and facility representative are being provided through the EMCBC Technical Cadre and a support service contractor (field safety oversight).
ACTUAL NEEDS	9	7	Note that actual needs are less than the totals, since certain technical capabilities are subsumed within multiple disciplines. Furthermore, actual needs do not include technical capabilities (such as criticality safety, fire protection engineering, and quality assurance) identified as being provided by the EMCBC Office of Technical Support and Asset Management.

Section Three: Current Shortages and plans for filling them

A full-time support service contractor has been retained for oversight of multiple field activities, and to mitigate retirement concerns

Section Four: Projected shortage/surplus over the next five years

Within the next five years there will be staff members eligible for retirement: the Site Manager, and the ES&H Program Manager.

Section Five: General concerns or recommendations related to the Technical Staffing.

General concerns relate to the timely availability of expertise in specific areas, such as nuclear safety or fire protection engineering, at critical project junctures. The SPRU Field Office will make every effort to identify emerging needs in specific technical areas as far in advance as possible so as to allow assignment of these resources from the EMCBC Office of Technical Support and Asset Management or acquisition via support service contractors.

**Annual Workforce Analysis and Staffing Plan Report
as of December 31, 2011
Reporting Office: Brookhaven National Laboratory**

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

- Surveillance & Maintenance of one radiological facility (determined to be below HC-3 analysis).
- Two radiological facility complexes undergoing D&D
- Removal of graphite from the Graphite Research Reactor, D&D of the reactor bioshield, installation of protective cap and monitoring wells
- Regulatory and project close-out of all EM work
- Peconic river hot-spot remediation
- Waste characterization, shipping, disposal

1. Describe any potential or probable changes to the mission that may significantly affect technical staffing needs. For example:

Completion of all Legacy scope by the end of 2011 will require significant resources for the transition of facilities from EM to SC

Section 2: Technical Staffing

Section Two - SITE CHARACTERISTICS TABLE¹

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

HC1 0 HC2 0 HC3 0*

Number of Radiological Facilities²: 2 (* 1 facility is below HC-3 by analysis)

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 Systems³: 0

Number of Site Contractor FTEs: 72

Number of Federal Office FTEs: **6 (this includes 2 FTE's temporarily assigned from other EMCBC)**

Notes:

1. Sites accountable to multiple Headquarter Program Offices should list FTE needs by each Cognizant Secretarial Office, e.g. Total 22 FTEs (EM - 20, NE - 2).
2. Radiological Facilities are defined in 10 CFR 830 as below Hazard Category 3 Facilities. Hazard Category 1, 2 or 3 Nuclear Facilities should not be double counted as Radiological Facilities.
3. Safety Systems must be credited in a Documented Safety Analysis.

Section Two – 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	1	1	This capability is performed by the Site Federal Project Director assigned from the EMCBC.
Safety System Oversight Personnel ²	0.1	0.1	This capability is split with the NSS function. Currently performed by the EM staff and support services contractors.
Facility Representatives ³	2.5	0	Currently rely on other project staff to supplement safety oversight.
Other Technical Capabilities:			
Aviation Safety Manager	0	0	N/A
Aviation Safety Officer	0	0	N/A
Chemical Processing	0	0	N/A
Civil/Structural Engineering	0.25	0.25	Matrix support from EMCBC and support services contractors
Construction Management	0.25	0.25	Matrix support from EMCBC and support services contractors
Criticality Safety	0	0	N/A
Deactivation & Decommissioning	1	1	Matrix support from EMCBC and support services contractors
Electrical Systems	0.1	0.1	Performed by EM project staff with matrix support from SC and support services contractors.
Emergency Management	0.1	0	Matrix support from SC
Environmental Compliance	0.25	0.25	Matrix support from EMCBC and support services contractors
Environmental Restoration	0.5	0.25	Performed by EM Project staff
Facility Maintenance Management	0.1	0	Matrix support from SC
Fire Protection Engineering	0.1	0	Matrix support from SC
Industrial Hygiene	0.2	0.2	This capability is performed by project staff with support from SC and support services contractors.
Instrumentation & Control	0	0	N/A
Mechanical Systems	0	0	N/A
NNSA Packaging Cert. Engineer	0	0	N/A
Nuclear Explosive	0	0	N/A.
Nuclear Safety Specialist	0.1	0.1	This capability is performed by project staff with support from support services contractors.
Occupational Safety	0.5	0.2	This capability is performed by project staff with support from support services contractors.
Quality Assurance	0.1	0.1	Performed by EM staff with matrix support from EMCBC and support services contractors.
Radiation Protection	0.5	0.1	Performed by EM staff with matrix support from SC and support services contractors.

Safeguards & Security	0	0	Matrix support from BHSO
Safety Software Quality Assurance	0	0	N/A
Technical Program Manager	0	0	Performed by EM Project staff
Technical Training	0.1	0.1	Performed by EM Project personnel with support services contractors.
Transportation & Traffic Mgmt.	0.3	0.3	Performed by EM Project staff
Waste Management	0.3	0.3	Performed by EM Project staff
Weapons QA	0	0	N/A
Federal Project Directors ⁴	1	1	Performed by EM Project staff. Note: these 2 positions are filled by staff temporarily assigned from other EM sites.
TOTAL:	8.85	4.6	

Notes:

1. These columns identify the number of FTEs needed to perform the Federal Safety Assurance function for your site or office based on potential facility and operational hazards.
2. SSO staffing analysis worksheets may be used in this process. They are posted at <http://www.hss.energy.gov/deprep/ftcp>.
3. Facility Representative staffing analysis worksheets are posted at <http://www.hss.energy.gov/deprep/ftcp>.
4. Federal Project Managers/Directors are not qualified via the Technical Qualification Program, but are qualified in accordance with DOE O 360.1A using the Project Management Career Development Program

Section Three: Current shortages and plans for filling them

Facility Representatives positions required to cover project has multiple work activities and the other has work conducted on multiple shifts, 6 days per week. EM staff has developed and implemented an Oversight Plan to provide full time coverage using project engineers to provide safety oversight as needed.

Note: All permanent EM staff left the project by 05/11.

All EM staff positions are currently filled with staff assigned from the EMCBC. These assignments ended on 9/30/11 and 5/28/11, respectively.

Section Four: Projected shortage/surplus over next five years

At full staffing, the number of FTE's and skills cannot fully support the project needs. Current plans call for the completion of all EM scope at the end of FY12 and the reassignment of current DOE EM FTE's.

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

Shortages will be adequately addressed by utilizing support services contractors or the EMCBC Office of Technical Support and Asset Management for short-term assignments.

**Annual Workforce Analysis and Staffing Plan Report
As of December 31, 2011
Reporting Office: Moab UMTRA Project**

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

The project mission is to remediate more than 12 million cubic yards of contaminated mill tailings and mill debris, contaminated vicinity properties, and contaminated groundwater associated with the former Atlas Minerals Corporation (Atlas) uranium-ore processing and mill site in Moab, Utah, consistent with the Uranium Mill Tailings Radiation Control Act standards.

The project will relocate the mill tailings pile away from the Colorado River to a DOE-constructed disposal facility near Crescent Junction, Utah, primarily via rail transportation. DOE will assess the extent of radiological contamination at the mill site and vicinity properties, characterize the proposed disposal site and construct a disposal cell, excavate and remove the tailings pile to the disposal cell, and remediate local ground water. The remainder of the mill site will be verified to meet radiological standards and then restored to an acceptable condition. Demobilization from the site will complete the on-site activities, except in the case of active ground water restoration. DOE also will investigate unidentified vicinity properties to assess the presence of contamination.

More specifically this includes:

- Residual Radioactive Material (RRM) excavation
- RRM management, transfer, and handling
- Transport of RRM primarily by rail
- Disposal cell excavation and placement of RRM
- Installation of disposal cell cover
- Ongoing ground water cleanup
- Vicinity property cleanup as determined necessary
- Site Operations and Maintenance
- Project Support [Project Management System; Integrated Safety Management System; Environment, Safety and Health Programs; Administration (infrastructure, records management, communications); Safeguards and Security; Quality Assurance].

Section Two: Technical Staffing

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

HC 1 0 HC 2 0 HC 3 0

Number of Radiological Facilities: 1

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 Systems²: 0

Number of Contractor FTEs: 153

Number of Federal Office FTEs: 4

1. Facilities, systems, personnel, and authorities listed should be those in the organization's immediate line authority.

2. Safety Systems must be credited in the DSA or be recognized defense in depth system.

TECHNICAL CAPABILITY	For All Hazardous Facilities		Comments
	Number of FTEs Needed	Number of FTEs Onboard	
Senior Technical Safety Managers	0.25	0.25	This capability is performed by the Federal Project Director.
Safety Systems Oversight Personnel	0.50	0.50	This capability is performed by the Health and Safety Manager.
Facility Representatives	0.50	0.50	FR duties for both sites are performed by one person.
Other Technical Capabilities:			
Aviation Safety Manager	0	0	
Aviation Safety Officer	0	0	
Chemical Processing	0	0	
Civil/Structural Engineering	0	0	
Construction Mgmt	0	0	
Criticality Safety	0	0	
Deactivation and Decommissioning	0	0	
Electrical Systems	0	0	
Emergency Management	0.25	0.25	This capability is performed by the Health and Safety Manager.
Environmental Compliance	0.25	0.25	These capabilities are assigned to DOE compliance manager-Art Murphy.
Environmental Restoration	0.50	0.50	These capabilities are assigned to DOE compliance manager – Art Murphy.
Facility Maintenance Mgmt	0	0	
Fire Protection Engineering	0	0	
Industrial Hygiene	0.25	0.25	This capability is performed by the Health and Safety Manager.
Instrumentation and Control	0	0	
Mechanical Systems	0	0	
Nuclear Explosive Safety	0	0	
Nuclear Safety Specialist	0	0	
Occupational Safety	0.25	0.25	This area is the responsibility of the FR.

Quality Assurance	0.25	0.25	This area is the responsibility of the FR.
Radiation Protection	0.25	0.25	This area is the responsibility of the FR.
Safeguards and Security	0	0	
Safety Software Quality Assurance	0	0	
Technical Program Manager	0	0	
Technical Training	0	0	
Transportation & Traffic Mgmt	0	0	This position covered by FPD and TAC
Waste Management	0	0	
Federal Project Director	0.75	0.75	
TOTALS:	4.0	4.0	

Section Three: Current Shortages and plans for filling them

The Transportation & Traffic Mgmt capability is managed by DOE and technical assistance contractors with coordination with HQ specialists. No shortage

Section Four: Projected shortage/surplus over the next five years

Within the next eight years, the four on board staff members will be eligible for retirement.

Section Five: General concerns or recommendations related to the Technical Staffing.

NA

**Annual Workforce Analysis and Staffing Plan Report
as of December 31, 2011
Reporting Office: Energy Technology Engineering Center**

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

1. Provide several bullets that frame the types and magnitude of technical capabilities currently needed for safe operations in your sites hazardous facilities (non-nuclear and nuclear facilities including radiological facilities) or activities. For example:
 - EIS for Area IV of Santa Susana Field Laboratory (of which ETEC is part of)
 - One sodium facility decontamination and decommissioning (D&D) at ETEC
 - One hazardous waste management facility D&D at ETEC
 - Two radiological facilities D&D at ETEC
 - RCRA corrective measures at ETEC
 - General Electric Vallecitos contract closeout settlement agreement

2. Describe any potential or probable changes to the mission that may significantly affect technical staffing needs. For example:
 - D&D at ETEC project was delayed due to court ordered EIS and EPA Radiation survey
 - Affects of California SB990 on cleanup standards at ETEC
 - State is requiring completion of ETEC RCRA scope by the end of FY2017, based on Consent Order signed in August 2007
 - Potential General Electric (GE) scope in the future

Section Two: Technical Staffing

The following Technical Staffing tables complete this section.

Complete the tables as follows for each of the technical capabilities:

- Except for Senior Technical Safety Managers (STSM), enter the number of personnel in Full Time Equivalent (FTE) (e.g. 0.1 FTE) needed to support safe operations for your site or office. Enter the number of FTE personnel who are onboard as of December 2010.
- STSM qualification is 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 2011.
- STSM/Facility Representative (FR)/Safety System Oversight (SSO) personnel are generally required for all nuclear facilities. FRs are also used for other types of hazardous facilities. If any personnel in these areas are also assigned to technical specialties on the list; 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.

Section Two (continued):

- 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 competency 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.
- The same person may be included in multiple capabilities as a fraction of an FTE in each capability.
- 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.

Section Two - SITE CHARACTERISTICS TABLE¹

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

HC1 0 HC2 0 HC3 0

Number of Radiological Facilities²: 2 - (B4024 & RMHF)

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

Number of Low Hazard Non-Nuclear Facilities: 2 Facilities: SPTF (Sodium Facility) and HWMF (Hazardous Waste Management Facility)

Number of Documented Safety Analyses: 0

Number of Safety Systems³: 0

Number of Site Contractor FTEs: Varies depending on the workload

Number of Federal Office FTEs: 2

Notes:

1. Sites accountable to multiple Headquarter Program Offices should list FTE needs by each Cognizant Secretarial Office, e.g. Total 22 FTEs (EM - 20, NE - 2).
2. Radiological Facilities are defined in 10 CFR 830 as below Hazard Category 3 Facilities. Hazard Category 1, 2 or 3 Nuclear Facilities should not be double counted as Radiological Facilities.
3. Safety Systems must be credited in a Documented Safety Analysis.

Section Two – 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	1	0	EMCBC personnel provide this technical capability as needed
Safety System Oversight Personnel ²	0	0	
Facility Representatives ³	1	0	This function is performed by a Support Services contractor with technical support and assistance from the EMCBC as needed
Other Technical Capabilities:			
Aviation Safety Manager	0	0	
Aviation Safety Officer	0	0	
Chemical Processing	0	0	
Civil/Structural Engineering	0	0	
Construction Management	0	0	
Criticality Safety	0	0	
Deactivation & Decommissioning	0.25	0	This function is performed by a Support Services contractor with technical support and assistance from the EMCBC as needed
Electrical Systems	0	0	
Emergency Management	0	0	
Environmental Compliance	0	0	This function is performed by a Support Services contractor with technical support and assistance from the EMCBC as needed
Environmental Restoration	.75	0	This function is performed by a Support Services contractor with technical support and assistance from the EMCBC as needed
Facility Maintenance Management	0	0	
Fire Protection Engineering	0.1	0	Technical assistance in this area will be provided by the EMCBC and DOE HQ as needed
Industrial Hygiene	1	0	This function is performed by a Support Services contractor with technical support and assistance from the EMCBC as needed
Instrumentation & Control	0	0	
Mechanical Systems	.25	0	This function is performed by a Support Services contractor with technical support and assistance from the EMCBC as needed
NNSA Packaging Cert. Engineer	0	0	Not Applicable
Nuclear Explosive	0	0	Not Applicable
Nuclear Safety Specialist	0.25	0	This function is performed by a Support Services contractor with technical support and assistance from the EMCBC as needed
Occupational Safety	0.25	0	This function is performed by a Support Services contractor with technical support and assistance from the EMCBC as needed
Quality Assurance	0.25	0	This function is performed by a Support Services contractor with technical support and assistance from the EMCBC as needed
Radiation Protection	0.15	0	This function is performed by a Support Services contractor with technical support and assistance from the EMCBC as needed
Safeguards & Security	0	0	EMCBC personnel provide this technical capability as needed
Safety Software Quality Assurance	0	0	EMCBC personnel provide this technical capability as needed
Technical Program Manager	1	0	This technical capability is split equally between the Federal Project Director and Deputy Federal Project Director
Technical Training	0	0	EMCBC personnel provide this technical capability as needed
Transportation & Traffic Mgmnt	0	0	EMCBC personnel provide this technical capability as needed
Waste Management	0	0	EMCBC personnel provide this technical capability as needed

Weapons QA	0	0	N/A
Federal Project Directors ⁴	2	2	1 employee is certified and the other employee is a candidate for certification
Total ETEC Project Office	6	2	ETEC utilize a Support Services contractor and the EMCBC as needed.

Notes:

1. These columns identify the number of FTEs needed to perform the Federal Safety Assurance function for your site or office based on potential facility and operational hazards.
2. SSO staffing analysis worksheets may be used in this process. They are posted at <http://www.hss.energy.gov/depdep/ftcp>.
3. Facility Representative staffing analysis worksheets are posted at <http://www.hss.energy.gov/depdep/ftcp>.
4. Federal Project Managers/Directors are not qualified via the Technical Qualification Program, but are qualified in accordance with DOE O 360.1C using the Project Management Career Development Program

Section Three: Current shortages and plans for filling them

List current shortages of technical personnel identified in Section Two, compensatory measures if applicable, actions taken to fill shortages, and schedule for filling shortages.

None at this time

Section Four: Projected shortage/surplus over next five years

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

Technical staff is being supported by support service contractors. The EMCBC and EM 50 will provide technical capabilities and support for this project due to additional scope and stakeholders/lawsuit complexity.