STATEMENT OF WORK

Radiological Control Staff Augmentation

Revision 0

January 8, 2018

Prepared by
Nuclear Waste Partnership LLC
Carlsbad, New Mexico

for

U. S. Department of Energy
Waste Isolation Pilot Plant
SECTION I: INTRODUCTION AND BACKGROUND

General Description of Services Being Sought

Nuclear Waste Partnership (NWP) requires Radiological Protection support personnel (RadCon) to assist with the mission of the Waste Isolation Pilot Plant (WIPP). The required services shall include personnel, area surveys, surveillance and control of work involving high activity, and alpha bearing materials (transuranic) at WIPP in Carlsbad, New Mexico. WIPP is a Department of Energy (DOE) facility located 33 miles southeast of Carlsbad, NM. These work areas are potentially identified as Contamination Areas (CAs), High Contamination Areas (HCAs) and Airborne Radioactivity Areas (ARAs) and include both surface and underground areas of WIPP.

Background

NWP is the WIPP Maintenance & Operations (M&O) contractor responsible for operations at the WIPP Site, scheduling and coordinating waste transportation, and managing the Central Characterization Program (CCP) for the DOE Carlsbad Field Office (CBFO).

SECTION 2: REQUIREMENTS DOCUMENTS

All work performed hereunder shall be in accordance with the below stated documentation and such other requirements as stated therein. The documentation below may be changed, at any time, as deemed appropriate by NWP.

| 10 CFR 830.120 | “Quality Assurance Requirements.” U.S. Department of Energy [743] |
| 10 CFR 851 | “Worker Safety and Health Program.” U.S. Department of Energy [312, 345] |
| 49 CFR 173 | “Shippers - General Requirements for Shipments and Packaging.” U.S. Department of Transportation [423] |


Instruments.” [562.1, 564]


ASME AG-1, “Code on Nuclear Air and Gas Treatment.” [464.3]


DOE G 151.1-4, (7/11/07) “Response Elements.” [213.2]


DOE O 440.1-1B, (5/17/07) “Worker Protection Program for DOE (including National Nuclear Security Administration) Federal Employees.” [312, 345]

DOE O 458.1, (1/15/2013) “Radiation Protection of the Public and the Environment.” [422, Glossary]

DOE O 460.1C, (5/14/2010) “Packaging and Transportation Safety.” [423]

DOE O 460.2A, (12/22/04) “Departmental Materials Transportation and Packaging Management.” [423]


SECTION 3: SCOPE

All RadCon personnel should be qualified to ANSI 3.1 or have a current DOE Core card.

All work defined in this Statement of Work (SOW) shall be performed under the direction and guidelines of NWP Safety Management Policies.

3.01 RadCon Technician

The RadCon Technician shall perform a wide variety of complex radiological assignments to minimize personnel exposures to radiological hazards and ensure compliance with applicable regulations and procedures; shall perform radiological surveys and complete documentation for receipt, processing and emplacement of contact-handled and remote-handled waste when assigned by the Cognizant Manager or designee; and shall perform similar and related duties as assigned. The RadCon Technician shall use respirators, as required.
Education
A High School Diploma or GED is required.

Experience
One year nuclear operations experience is required.

Other Requirements
Current DOE RCT Core is REQUIRED. A pre-employment physical is required that demonstrates ability to perform in underground/mine working conditions (see paragraph 6.02.2, “Working Conditions”). Personnel shall be required to complete and maintain training and qualifications for respirator use.

3.02 RadCon Engineer
The RadCon Engineer shall be responsible for the day-to-day implementation of the WIPP Radiological Control Program and Conduct of Operations in all aspects of normal, abnormal and emergency response work. The RadCon Engineer shall provide radiological engineering support and oversight for the day-to-day activities, regarding Radiation Protection implementation of 10 CFR 835, applicable DOE Orders, WIPP Radiological Control Manual, and associated WIPP Radiological Control procedures. The RadCon Engineer shall be responsible for assisting with the implementation and continuing improvement of the WIPP radiological control program. The RadCon Engineer shall be responsible provides technical health physics support to the Radiation Protection Program in assigned areas as a Subject Matter Expert.

Education
Baccalaureate degree in engineering, science, or a related field and at least 11 years related experience or an advanced degree in engineering, science, or a related field plus 9 years related experience or 19 years education/experience in lieu of a Bachelor degree are required for the position. Additionally, strong written and verbal communication skills are required.

Experience
Experience as a Radiological Engineer is preferred. CHP certification is preferred.

Other Requirements
ABHP certification and/or NRRPT registration is desirable.

Will be required to complete and maintain training and qualifications for respirator use. A pre-employment physical is required that demonstrates ability to perform in underground/mine working conditions (see paragraph 6.02.2, “Working Conditions”).

3.03 RadCon Mentor
The RadCon Mentor shall be responsible for the day-to-day implementation of the WIPP Radiological Control Program and Conduct of Operations in all aspects of normal, abnormal and emergency response work. The RadCon Mentor shall provide daily work assignments and ensure that radiological support for recovery and waste handling operations are conducted in accordance with approved procedures in compliance with 10CFR835. The RadCon Mentor shall be responsible for ensuring the completion of routine and job coverage surveys, posting and control of radiological areas, instrumentation maintenance and source control, routine air monitoring as well as other duties as assigned by the Radiological Control and Dosimetry Manager. The RadCon Mentor shall qualify as a Radiological Control Technician at the WIPP site.

Education
High School Diploma or GED with eight years of relevant experience, Associate Degree in engineering, science, or related field with six years of relevant experience, or Bachelor of Science Degree in engineering, science, or a related field with four years of relevant experience is required.

Experience
Experience as a DOE qualified Radiological Control Technician or equivalent military or civilian nuclear power experience is required.

Other Requirements
 Shall be required to complete and maintain training and qualifications for respirator use. A pre-employment physical is required that demonstrates ability to perform in underground/mine working conditions (see paragraph 6.02.2, “Working Conditions”).
3.04 **RadCon Supervisor**

The RadCon Supervisor shall be responsible for the day-to-day implementation of the WIPP Radiological Control Program and Conduct of Operations in all aspects of normal, abnormal and emergency response work. The RadCon Supervisor shall provide daily work assignments and ensure that radiological support for recovery and waste handling operations are conducted in accordance with approved procedures in compliance with 10CFR835. The RadCon Supervisor is responsible for ensuring the completion of routine and job coverage surveys, posting and control of radiological areas, instrumentation maintenance and source control, routine air monitoring as well as other duties as assigned by the Radiological Control and Dosimetry Manager. The RadCon Supervisor shall qualify as a Radiological Control Technician at the WIPP site.

**Education**

High School Diploma or GED with eight years of relevant experience, Associate Degree in engineering, science, or related field with six years of relevant experience, or Bachelor of Science Degree in engineering, science, or a related field with four years of relevant experience is required.

**Experience**

Experience as a DOE qualified Radiological Control Technician or equivalent military or civilian nuclear power experience is required.

**Other Requirements**

Shall complete and maintain training and qualifications for respirator use. A pre-employment physical is required that demonstrates ability to perform in underground/mine working conditions (see paragraph 6.02.2, “Working Conditions”).

**SECTION 4: QUALITY ASSURANCE**

4.01 Work performed at the WIPP will be in accordance with WP 13-1, *NWP Quality Assurance Program Description*, and applicable WIPP programs and implementing procedures.

4.02 The Subcontractor shall provide personnel qualified to perform the requested services. Documentation of personnel qualification will be provided prior to arrival of personnel at the WIPP Site.

**SECTION 5: REPORTS, DATA, AND DELIVERABLES**

Data shall be handled in accordance with daily operating technical procedures and direction from NWP Radiological Control Management.

**SECTION 6: OTHER SPECIAL CONSIDERATIONS**

6.01 **Anticipated Work Schedule** – Ten (10) hours per day schedule with overtime at the discretion of NWP. It is anticipated that work schedule will be for a five (5) day workweek.

6.02 **Additional Considerations**

*6.02.1 Required Equipment*

Radiological monitoring equipment will be provided by NWP.

*6.02.2 Working Conditions*

The Subcontractor employees shall meet the following job requirements;
- Able to lift and carry 35 pound for job assignments
- Able to climb a minimum of four story of stairs (e.g., Station A and the 2nd Floor ventilation room above the CH Bay at WIPP)
- Able to traverse uneven ground (e.g., the mine floor heaves can be anywhere from 6” to 2’ or more)
- Able to use a scaling bar with (both hands) in various positions and angles in a thrusting manner to sound the Rib (side walls) and the Back (roof) of the mine
  - Weight of Scaling Bars
    - 10’ - 22.5 lbs. with additional 1.5 lbs. scaling head
    - 13’ - 29.25 lbs. with additional 1.5 lbs. scaling head
- Able to work in the normal aspects of the mine, i.e.,
  - Dusty environment,
  - Work in low light environment using Miner Cap Lamp
  - Able to enter and exit the mine on the Conveyance Cage to the Underground at 2180’ below Surface
    - Salt Conveyance approx. 6’ X 5’
    - Waste Conveyance approx. 15’ X 15’
  - Work in the Heat and Humidity of the Underground wearing a respirator and Anti-C clothing for up to 4 hours