Statement of Work
Radiological Site Services Life Cycle Support Activities

Title: RSS Support for the In Vivo Monitoring Facility
Revision Number: 0
Date: August 23, 2016

Acronyms

BTR – Buyer’s Technical Representative
HEDP – Hanford External Dosimetry Program
HIDP – Hanford Internal Dosimetry Program
HRIP – Hanford Radiological Instrumentation Program
HRRP – Hanford Radiological Records Program
IVMP – In-Vivo Monitoring Program
M&TE – Measuring and Test Equipment
RSS – Radiological Site Services

1.0 INTRODUCTION / BACKGROUND

The Radiological Site Services (RSS) program at Hanford provides an array of radiological safety related services and recordkeeping that are critical to protecting the health and safety of Hanford workers, the public, and the environment. The programs are divided into four interrelated components:

- Hanford External Dosimetry Program (HEDP)
- Hanford Internal Dosimetry Program (HIDP)
- Hanford Radiological Instrumentation Program (HRIP)
- Hanford Radiological Records Program (HRRP)

2.0 OBJECTIVE

MSA requires a Subcontractor to provide services to support the In-Vivo Monitoring facility for the RSS Program. These Subcontractor must have specialized education, training, skill, and experience to support the life-cycle execution of the RSS Program. The requirements, roles and responsibilities are defined in Section 3 to support the scope of work. The Subcontractor is required to provide technical support services as set forth herein.

3.0 DESCRIPTION OF WORK – SPECIFIC

The RSS Program is designed to ensure the protection of the health and safety of DOE and Hanford Site workers and the public, and to demonstrate compliance with applicable laws, DOE
directives, and legally-binding agreements. The Hanford Site has numerous radiologically hazardous sites and facilities, and the RSS Program is integral to maintaining a safe operating environment. The RSS In-Vivo Monitoring facility requires support to ensure the MSA work scope is completed in a technically adequate and compliant manner that includes requisite traceability to standards and procedures.

3.1 TASK 1: Provide Radiological Site Services IVMP Technical Lead

The Subcontractor shall provide a qualified individual to serve as the RSS IVMP Technical Lead. The specific roles, responsibilities, qualifications and requirements include:

**QUALIFICATIONS**

Certification by the American Board of Health Physics plus a Master’s degree in health physics, radiological sciences or similar field of study and 15 years professional health physics experience, including experience with radiation detectors, multi-channel analyzers, electronic components and gamma spectroscopy; or a bachelor’s degree with 20 years’ experience as described above.

Expertise using personal computers, application software (e.g. Word, Excel), navigating the Internet is required.

Task or project management experience in a technical area is required.

Ability to clearly communicate verbally and in writing is required.

**RESPONSIBILITIES**

The IVMP Technical Lead has overall responsibility for the technical and administrative aspects of the program. They ensure work is performed in accordance with the applicable program documentation in order to meet contractual requirements of the clients, to ensure the maintenance of accreditation through the DOE Laboratory Accreditation Program, to provide technical direction for the program and to ensure adequate resources are available to support routine operations. This program falls under the jurisdiction of the Price Anderson Act Amendment and must meet requirements in 10 CFR 835 and 10 CFR 830.120.

**DUTIES**

Specific duties include:

- Ensure preparation and maintenance of program documentation including procedures, program manual, records inventory and disposition schedule and quality assurance plan.
- Develop and implement technical studies to support the routine monitoring program or advance the state-of-the-art.
- Ensure program capabilities are adequate to meet or exceed the DOELAP performance testing criteria and onsite assessment criteria.
- Determine training requirements and ensure staff are properly trained. Provide staff the resources to perform their work.
• Assist in the preparation of budget, assist with contract development, monitor spending, track progress of tasks.
• Ensure that hazards associated with the program are identified and adequately controlled.
• Ensure that equipment is maintained in good working condition, that there are sufficient spares, that future capital equipment needs are planned for and requests are submitted sufficiently in advance (years).
• Submit status reports to RSS Management, DOE-RL and Hanford customers upon request.
• Provide input to the annual report for the Hanford dosimetry and records programs.
• Interact with clients for problem resolution and to handle special requests.
• Communicate program requirements to team members.
• Communicate performance expectations to staff and provide feedback to staff on their performance.

The yearly estimated annual hours associated with RSS IVMP Technical Lead work scope for life-cycle execution of the RSS Program is 1830 hours.

3.2 TASK 2: Provide Radiological Site Services IVMP Lead Technician

The Subcontractor shall provide a qualified individual to serve as the RSS IVMP Lead Technician. The specific roles, responsibilities, qualifications and requirements are included in the following:

QUALIFICATIONS

Requires a minimum of an AA degree in science or engineering, with 10 years’ experience in the In-Vivo counting field or a related radiological discipline, and 15 years of Hanford experience.

Experience with personal computer operation including data entry and Word, Excel and e-mail is required. The ability to successfully complete assignments on time with a minimum of supervision is essential. The individual must be able to perform repetitive tasks in strict compliance with procedures, and have the ability to ensure the generation of high quality data with a minimum of errors, keep detailed and accurate logs of operation, and assure complete and accurate documentation of all quality-related tasks.

The ability to work efficiently under a heavy workload and handle multiple assignments is required. The candidate must have the capability to multi-task in a fast paced, team oriented environment, and work well with the public.

A proactive safety mindset is required, and the individual must be trained as Radiation Worker I, or be able to successfully complete and maintain the required training.
RESPONSIBILITIES

The IVMP Lead Technician is responsible for providing the technical support and direction to the IVMP Technician required for the day-to-day operation of the In Vivo Monitoring Program under the direction of the IVMP Technical Lead. Valid measurement results and associated supporting documentation are the expected outcomes.

The primary role is to provide day to day direction to the IVMP Technicians in order to perform, analyze, and report an average of 7,000 worker measurements annually and another 5,000 quality control measurements. The lead technician is responsible for conducting the daily operations in accordance with the RSS Quality Assurance Program Plan and approved implementing procedures (MSA-MA-554). The work involves state-of-the-art radiation detection systems and associated computer systems.

The position must effectively interact with other technicians and follow technical instructions from the Technical Lead to provide quality in vivo measurement services. The incumbent must generate valid in vivo measurement results for workers in order for them to make entries into radiologically controlled areas to perform their work. The incumbent must be able to perform their duties consistent with the requirements of the DOE Laboratory Accreditation Program.

The IVMP Lead Technician must be responsive to meeting the needs of the contractors, and is also accountable for maintaining a safe work environment, and proactively identifying potential safety issues.

Specific duties include:

- Provide day to day direction to the IVMP Technician
- Train or mentor junior staff and provide leadership within technical skill area.
- Assist with calibration of the counting systems.
- Perform routine measurement quality control tasks and IVMP counting functions in a safe and efficient manner.
- Perform all work according to established procedures for In-Vivo measurements.
- Perform detailed reviews of quality control (QC) counts and In-Vivo measurement data for completeness and accuracy, and recognize symptoms of counting system malfunctions and take appropriate actions to assure accuracy.
- Verify measurement results, generate necessary records, and ensure data is transferred to the REX database.
- Notify the Technical Lead if results exceed decision levels, or are unusual. Report results exceeding the decision level to internal dosimetry promptly.
- Prepare the facility for operation each day and properly secure the facility at the conclusion of the business day.
- Assist with other tasks in accordance with direction from the Technical Lead.
- Ensure that the germanium detectors are filled with liquid nitrogen.
- Assist with the preparation, revision, review and approval of technical procedures.
As directed, represent the IVMP on the REX Users Group.
Demonstrate commitment to maintaining a safe working environment by being proactive in safety awareness in carrying out assigned duties.
Effectively communicate verbally and in writing with workers, schedulers, and others inside and outside MSA.

The estimated annual hours associated with RSS IVMP Lead Technician work scope for life-cycle execution of the RSS Program is 1830 hours

3.3 TASK 3: Provide Radiological Site Services IVMP Technician

The Subcontractor shall provide a qualified individual to serve as the RSS IVMP Technician. The specific roles, responsibilities, qualifications and requirements include:

QUALIFICATIONS
Requires a minimum of an AA degree in science or engineering with 2 years’ experience in the in vivo counting field, external dosimetry field or a radiological instrumentation, or high school diploma plus 5 years’ experience in the in vivo counting field, external dosimetry field or a radiological instrumentation may be considered.

Experience with personal computer operation including data entry and Word, Excel and e-mail is required. The ability to successfully complete assignments on time with a minimum of supervision is essential. The individual must be able to perform repetitive tasks in strict compliance with procedures, and have the ability to ensure the generation of high quality data with a minimum of errors, keep detailed and accurate logs of operation, and assure complete and accurate documentation of all quality-related tasks.

The ability to work efficiently under a heavy workload and handle multiple assignments is required. The candidate must have the capability to multi-task in a fast paced, team oriented environment, and work well with the public.

A proactive safety mindset is required, and the individual must be trained as Radiation Worker I, or be able to successfully complete and maintain the required training.

RESPONSIBILITIES
The RSS IVMP Technician is responsible for providing the technical support to In Vivo Monitoring Program. Valid measurement results and associated supporting documentation are the expected outcomes.

The technician is responsible for conducting the daily operations in accordance with the RSS Quality Assurance Program Plan and approved implementing procedures (MSA-MA-554). The work involves state-of-the-art radiation detection systems and associated computer systems.

The position must effectively interact with other RSS personnel and follow technical instructions from the respective department Lead to provide quality services. The incumbent must generate valid measurement results for workers in order for them to
make entries into radiologically controlled areas to perform their work. The incumbent must be able to perform their duties consistent with the requirements of the DOE Laboratory Accreditation Program.

The IVMP Technician must be responsive to meeting the needs of the contractors, and is also accountable for maintaining a safe work environment, and proactively identifying potential safety issues.

Specific duties include:

- Assist with calibration of the counting systems.
- At the direction of the Lead Technician, perform routine measurement quality control tasks and IVMP counting functions in a safe and efficient manner.
- Perform all work according to established procedures for In-Vivo measurements.
- Perform detailed reviews of quality control (QC) counts and In-Vivo measurement data for completeness and accuracy, and recognize symptoms of counting system malfunctions and take appropriate actions to assure accuracy.
- Verify measurement results, generate necessary records, and ensure data is transferred to the REX database.
- Notify the Technical Lead or Lead Technician if results exceed decision levels, or are unusual. Report results exceeding the decision level to internal dosimetry promptly.
- Prepare the facility for operation each day and properly secure the facility at the conclusion of the business day.
- Assist with other tasks in accordance with direction from the Technical Lead.
- As directed by the Technical Lead, fill germanium detectors with liquid nitrogen.
- Assist with the preparation, revision, review and approval of technical procedures.
- As directed, represent the IVMP on the REX Users Group.
- Demonstrate commitment to maintaining a safe working environment by being proactive in safety awareness in carrying out assigned duties.

The estimated annual hours associated with RSS IVMP Technician work scope for lifecycle execution of the RSS Program is 1830 hours

4.0 REQUIREMENTS

General

Subcontractor shall operate to MSA policies, procedures, and processes. MSA will supervise and direct the day to day work activities of the Subcontractor’s personnel.

For any work performed on the Hanford Site or any MSA controlled facility, the provisions of the On-Site Services Provisions, will apply to Subcontractor personnel.
4.1 ES&H Requirements

The Subcontractor shall perform work safely, in a manner that ensures adequate protection for employees, the public, and the environment, and shall be accountable for the safe performance of work. The Subcontractor shall comply with, and assist the Buyer in complying with Environmental, Safety, Health, and Quality (ESH&Q) requirements of all applicable laws, regulations and directives.

The Subcontractor shall exercise a degree of care commensurate with the work and the associated hazards. The Subcontractor shall ensure that management of ES&H functions and activities is an integral and visible part of the Subcontractor’s work planning and execution processes. As a minimum, the Subcontractor shall:

- Thoroughly review the defined scope of work;
- Identify hazards and ES&H requirements;
- Analyze hazards and implement controls;
- Perform work within controls; and
- Provide feedback on adequacy of controls and continue to improve safety management.

The Subcontractor shall flow down ESH&Q requirements to the lowest tier Subcontractor performing work on the Hanford site commensurate with the risk and complexity of the work.

4.3 Quality Assurance Requirements

The work activities for this statement of work shall be performed in accordance with the MSA’s Quality Assurance Program and procedures.

4.4 Government Property

The Subcontractor will be working on site and using government-provided computers, work stations, and other equipment.

5.0 PERSONNEL REQUIREMENTS

5.1 Training and Qualification

A. Subcontractor shall ensure that its personnel meet and maintain the appropriate training, qualification and certification requirements. Hanford site-specific general training requirements to safely perform this work will be designated by the Buyer’s Technical Representative (BTR).
B. The following types of training qualifications are required: HGET

Subcontractor shall participate in the required training designated by the facility. Subcontractor shall contact the BTR prior to start date for instructions and training requirements. An estimated 8 hours of training to be performed on the first day of the on-site visit.

C. The Subcontractor must meet the following minimum qualifications:

   **Required Qualifications:**

   Emphasis in the internal dosimetry, radiological records, and radiological instrumentation fields. Meet the requirements for education and experience as identified in Section 3.0 of this document. Subcontractor shall provide resumes of all proposed staff for BTR review and approval.

   **Desired Qualification:**

   Experience with the Hanford Site RSS program

5.2 **Security and Badging Requirements**

   A. For any on site work, see Special Provisions – On-Site Services for details.

   B. The Subcontractor shall wear a Buyer-issued security badge identifying themselves. A minimum of two working days advance notice is needed for site badging.

   C. Subcontractor employees will be required to submit to vehicle searches and not personally carry or transport certain prohibited articles.

5.3 **Work Location/Potential Access Requirements:**

   MSA shall provide access to the HEDP computer systems and software located in Building 6266 and 805 Goethals, Richland, WA for execution of this subcontract.

5.4 **Site Access and Work Hours**

   The Radiological Site Services In Vivo Monitoring facility is open to clients Monday – Thursday and operates on the 4/10’s schedule. The standard work day shall consist of ten (10) hours of work between 6:00 AM and 4:30 PM, with one-half hour designated as an unpaid period for lunch. Due to the quality control requirements of the facility which need to be performed on Fridays, the Technical Lead has the opportunity to work an alternate work schedule negotiated and documented with RSS management.
6.0  MEETINGS, SUBMITTALS

Subcontractor shall participate in all meetings as required by the Buyer’s Technical Representative (BTR). Subcontractor shall prepare summary of meeting and submit the summary to the BTR within 1 day of the meeting. The summary shall include attendees, any decisions, actions, and general discussion items.

7.0  DELIVERABLES, PROJECT CONTROLS, MILESTONES AND PERFORMANCE SCHEDULE REQUIREMENTS

7.1  Deliverables

None associated with this contract.

7.2  Schedule

Start date:  January 1, 2017
Completion date:  9/30/2018