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SECTION C - PERFORMANCE WORK STATEMENT

C.1 OVERVIEW OF 222-S LABORATORY SERVICES

C.1.1 BACKGROUND

C.1.1.1 The Hanford Site

The 586 square-mile Hanford Site, located in southeast Washington State, was established in the 1940s as a plutonium production complex for the Manhattan Project. Throughout Hanford's 50 years of operation, byproducts of plutonium production have accumulated to become this country's largest environmental cleanup project. In 1989, the Department of Energy (DOE), the U. S. Environmental Protection Agency, and the Washington State Department of Ecology signed the Hanford Federal Facility Agreement and Consent Order, commonly known as the Tri-Party Agreement (TPA), which codifies the DOE's commitment to clean up the Hanford Site. The TPA outlines legally enforceable project milestones for Hanford cleanup over the next several decades.

C.1.1.2 Site Management

The Hanford Site is managed by two DOE field offices, the Richland Operations Office (RL) and the Office of River Protection (ORP). ORP manages 177 underground tanks of liquid and solid radioactive chemical waste, and is responsible for construction of the Waste Treatment and Immobilization Plant (WTP). RL has responsibility for the remainder of the Hanford Site, which includes: cleanup of the river corridor, cleanup and ongoing waste management operations in the central plateau, and providing a variety of crosscutting site services (e.g., utilities, security, information technology (IT), fire department, emergency management, and occupational medical services).

C.1.1.3 222-S Laboratory

The Contractor shall provide all services required to operate, manage and maintain the Hanford 222-S Laboratory. The scope of this contract is to perform the Analytical Services production functions of receiving, handling, analyzing, storing samples, and reporting the results of analyses to the contractors of Department of Energy Offices at the Hanford Nuclear Site near Richland, Washington. These functions will be performed through a contract with the DOE Office of River Protection at the 222-S Laboratory complex, a Hazard Category 3 Nuclear Facility, located in the 200 West Area of Hanford. These services support cleanup and closure of the Hanford site and are a critical activity in achieving closure goals of all Hanford projects. As directed by the Contracting Officer, the Contractor shall perform work supporting scientific research and other DOE sites.

The 222-S Laboratory building complex is owned by DOE and managed by the Tank Operations Contractor (TOC). The TOC is also the major customer for

analytical services at the 222-S Laboratory; some other site contractors are minor customers. The Contractor's work will be performed under DOE-approved programs managed by other Hanford site contractors. The Contractor shall interface with the TOC, other customers, and site-wide program managers in a manner so as to maintain consistency of business and site practices among Hanford prime contractors. This requires close coordination with other contractors on the site that provide infrastructure, programs, and samples to be analyzed.

The Contractor shall not use offsite laboratory facilities or services to analyze Hanford samples.

C.1.1.4 Sources of Samples to be Analyzed

The samples analyzed at 222-S come from sampling activities at Tank Farms and across the Hanford site. Such activities include, but are not limited to:

- Tank waste sampling events. These samples may be liquid, solid (sludge), salt cake, or a mixture. Samples are drawn for a variety of purposes, such as corrosion monitoring, chemistry control, and caustic addition; physical, chemical and radiological characterization; waste compatibility assessments; tank closure; and hard heel (gibbsite and boehmite) dissolution studies.
- Vadose zone sampling. Samples consist of a soil matrix potentially contaminated with tank waste or separations process waste.
- Evaporator campaigns to reduce the volume of tank waste. Samples are composed of evaporator feed (tank supernate) or evaporator boildown.
- Emergent work in a variety of matrices. For example soil, building materials, air and aqueous or organic liquids. Samples may be contaminated with tank waste, separations process waste or other hazardous chemical and/or radiological materials.
- Beryllium testing. Samples are primarily 100 cm2 swipes but may be other matrices, such as soil or building materials, contaminated with beryllium. Some beryllium samples may be radiologically contaminated.
- Support for demolition of Hanford's Plutonium Finishing Plant. Samples may contain high alpha contamination.
- Industrial hygiene monitoring. Samples typically consist of vapor tubes which are tested for ammonia and mercury but may include air grab samples.
- Support for groundwater monitoring. Samples may contain water soluble radionuclide species, such as cesium or pertechnetate.

C.1.2 LABORATORY OPERATIONS OVERVIEW

C.1.2.1 Analytical Operations

The Contractor shall provide analytical chemistry support for all restoration, tank waste processing and closure operations on the Hanford site. An estimated range of 40,000 to 60,000 analyses, as outlined in attachment C.1, an estimated range of 2,450 – 3,820, Thermal Desorption Unit analyses, and a range of 1,000

to 1,500 Summa Canister cleanings, will be performed annually on individual samples, field blanks and calibration standards. The tank operations contractor (TOC) is the 222-S laboratory's primary customer, with a comparatively small amount of work required by other site contractors, DOE sites or DOE research facilities. Responsibilities will include but will not be limited to sample receipt at the 222-S facility, sample handling and preparation, customer consultation, sample analysis, data management, issue of data reports, and site standards laboratory services. Work shall be performed in compliance with DOE directives, quality assurance requirements, safety requirements, and federal and state of Washington regulations applicable to a DOE hazard category 3 nuclear facility.

Samples received at the 222-S laboratory may be highly radioactive, potentially exceeding 300 rad/hour (3 Gy/hour) with a significant portion gamma. The Contractor sample custodian shall work closely with the facility special nuclear materials inventory steward to manage inventory levels and maintain compliance with the Technical Safety Requirements shown in Attachment J.6. The 222-S analytical services Contractor shall be responsible for hot cell operations necessary for sample receipt, preparation and distribution. The Contractor shall also receive samples not requiring hot cell work which they shall analyze or distribute to TOC personnel within the 222-S facility, or package for shipment to other facilities as required by the TOC.

The Contractor shall interface with customers to plan and schedule analytical services and tailor sample analysis methods and reporting formats to customer requirements. Planning and scheduling shall consider the cyclical nature of the laboratory workload as well as customer priorities. The Contractor shall assist with analysis method selection and develop new methods to meet evolving customer needs. The Contractor shall provide analytical support for unplanned and emergent work. Components of report formats may include raw data, data summary reports, method detection limits with qualifiers, QA data and associated QA qualifiers, and data upload into the Laboratory Information Management System (LIMS) with defined electronic deliverables. Note that OmniLIMS™ is the product used at 222-S Laboratory.

Analytical procedures developed for use in the 222-S laboratory are primarily EPA SW-846 methods with customer approved modifications for laboratory worker safety. Industrial hygiene procedures are based upon NIOSH methods. Radiochemistry protocols are generally based upon commercially available technologies or have been developed by the 222-S Laboratory specifically for use in the facility. Samples will be in a variety of different liquid, solid and gas matrices. Work will include organic chemistry, inorganic chemistry, radiochemistry and physical characterization of sample material. Attachment C.1 of this section lists required analytical chemistry capabilities. The Contractor shall strictly adhere to sample holding time requirements defined by the customer according to expected sample properties and constituents to be analyzed. Analyses shall be performed by qualified Contractor personnel utilizing appropriate provided instrumentation. The Contractor shall perform

required instrument calibration checks and routine housekeeping. Section C.2.1.10.2 lists the types of instrumentation provided.

Data generated by analyses shall be reviewed, entered into the OmniLIMS™, QA reviewed by a process chemist, and written into a narrative for issuance in a final report. The Contractor shall utilize the 222-S OmniLIMS™ to track samples and manage data.

The Contractor shall adhere to the 222-S facility manager's sample waste disposal procedures. Alternatively customers may request archiving of samples or have excess samples returned to them. Archival approval is obtained from the TOC. Sample archiving is described in Section C.1.2.4.

The Contractor shall perform the following chemical management functions at the 222-S Laboratory: chemical procurement needs to the (TOC and Contractor's needs) TOC; quality assurance; receiving, unpacking, inspection, storage, and tracking; chemical custodianship; and compiling data to meet reporting requirements. The Contractor shall also perform chemical management functions for chemical storage areas shared with the TOC within the 222-S Laboratory. The Contractor shall maintain compliance with 222-S Laboratory safety and chemical hygiene requirements.

The Contractor shall participate in the Operating Experience (OpEx) lessons learned program.

The Contractor shall support TOC's planning for the development of 222-S laboratory annual and multi-year tank waste treatment baselines. Support will include providing information on laboratory work activities, inspecting and documenting the condition of the facility and equipment, assessing necessary laboratory upgrades and renovations, and estimating the materials and developing the assumptions required for providing continued analytical services at the 222-S laboratory. The Contractor shall provide the foregoing information formally or informally, as necessary after the completion of the transition period, for the TOC to maintain awareness, develop their project baselines, and produce 222-S Laboratory/Performance Status Reports (Deliverable C-03).

The Contractor shall meet all holding time deadlines. Holding times are the length of time from sample collection allotted to the Contractor to perform sample analysis and are not negotiable. Holding times are established by regulatory organizations to prevent sample degradation and are dependent upon the analyte and testing methodology.

C.1.2.2 Development of Laboratory Standards and Reagents

The Contractor shall produce analytical reagents and standards for use in the 222-S facility and serve as standards custodian.

The Contractor shall perform routine standards inventory maintenance, chemical stabilization and document traceability to National Institute of Standards and

Technology (NIST) standards, if available. When recognized standards material is not available, or its purchase is impractical, the Contractor should attempt to purchase standards material from a reliable source. The Contractor shall have procedures in place to determine the acceptability of such materials. In addition, the standards laboratory may be asked to clean and chemically inactivate sample collection equipment.

C.1.2.3 Development of New Analytical Methods

The Contractor shall work with the TOC to determine needs for new and replacement instruments, and shall be responsible for developing methods and procedures for new equipment and instruments delivered to the Laboratory for which the Contractor is the primary user.

In addition, the Contractor shall develop new analytical methods each fiscal year to meet customer requirements.

C.1.2.4 Sample archiving

Customers may request to have samples which are analyzed at the 222-S laboratory archived by the lab. The Contractor shall be responsible for sample archiving, sample reconstitution, documentation and tracking of archive samples and annual archive maintenance. The Contractor shall notify customers annually of their archive inventory and make requests to dispose of samples that are no longer needed.

C.1.2.5 Workload and Customer Interface Management

The Contractor shall work with its customers to develop Service Level Agreements (SLAs) for each fiscal year or more often if mutually agreeable. Prior to implementation the SLAs (Deliverable C-13) shall be submitted to DOE for review and approval. DOE will review and approve the deliverable within thirty (30) days of receipt. The SLAs shall describe the task requirements including reporting format and shall contain a level of detail sufficient for DOE to determine whether the task is consistent with customer baselines and represents a reasonable use of resources. DOE will review customer projections to determine whether they are realistic given expected site conditions and work with the Contractor to develop a strategy for managing the expected work.

The Contractor shall deliver final sample analysis reports (deliverables) to the customer on or before the date agreed upon with the customer at sample receipt. The time allotted for generation and transmittal to the customer of a final deliverable is generally dependent upon sample characteristics, analyses requested and report format requirements.

C.1.2.6 Thermal Desorption Units

The Contractor shall obtain and maintain American Industrial Hygiene Association accreditation, develop the required methods, train staff, and perform all the required activities to perform; laboratory analysis of Furans using TDU tubes by Gas Chromatography/Mass Spectrometry (GC/MS), Industrial Hygiene analysis of Volatile Organic Analytes (VOA), Semi-Volatile Organic Analytes (Semi-VOA), Vapor Samples collected on Thermal Desorption Tubes by GC/MS. The annual estimate of analysis ranges from 2,600 to 3,100 analysis per year. The contractor shall maintain a level of service within the Fixed Priced CLIN for the following number of analyses. The quantity of these tests is to remain separable from the 40,000 to 60,000 types of analysis included in paragraph C.1.2.1 above.

Contract Period	Min	Max
150	120	190
Option Period 1	2,130	3,330
Option Period 2	2,450	3,820
Option Period 3	2,450	3,820

C.1.2.7 Summa Canisters

The Contractor shall perform work as covered in the 222-S Laboratory Technology Procedure USQ #2S-16-0450-S, attachment 6 ATS-LO-080-153, Cleaning Air Sampling Canisters using the Entech 3100D cleaning station. The contractor shall maintain a level of service to provide an estimated minimum of 1,000 to a maximum of 1,500 cleaning/re-evacuations per contract year. The quantity of these tests is to remain separable from the 40,000 – 60,000 types of analysis and TDUs included in paragraph C.1.2.1 above.

C.2 SCOPE ALLOCATION

C.2.1 ROUTINE ANALYTICAL SERVICES (FIXED PRICE SCOPE WITH AWARD FEE)

The Contractor shall perform laboratory operations, maintain a “Readiness to serve capability”, and providing analytical services to site customers as negotiated through Service Level Agreements. “Readiness to serve” means ability to perform the analytical work described in all approved LA&TS contractor procedures with required safety and quality. The Contractor may not turn down work for which it has applicable procedures and functioning equipment and appropriately trained and qualified staff unless specifically approved by DOE. If the Contractor wishes to cancel an existing procedure without issuing a replacement procedure that provides equivalent capability, the Contractor must first receive approval from the CO

The Contractor shall furnish all things necessary for, or incident to, the performance of work described above and in this section of the contract, excluding that which is specifically identified as Labor-Hour in Section C.2.2 and excluding that which is furnished directly by the Government or through other site contractors as identified in Section C.2.1.10.

C.2.1.1 Management and Administration

(a) The Contractor shall submit a Monthly Performance Report (Deliverable C-03) representing the prior month's activities and transmit it to the Contracting Officer by the 15th of the month. The Monthly Performance Report shall be a Microsoft PowerPoint presentation that includes, at a minimum, the following:

- Manager or Chief Financial Manager narrative assessment.
- Significant accomplishments, special activities, and process improvements.
- Summary of the results of any self-assessments performed.
- Number of samples expected vs. received from customers for the month and the fiscal year-to-date.
- Summary of SLA status/updates and 30-day forecast for sample receipt.
- List of reports issued to customers.
- 30-day forecast for major activities and 60-day forecast for the projected volume of analytical work, planned surveillances and assessments, new laboratory methods to be developed, planned instrument purchases and retirements, staff training and qualification, and any planned initiatives related to health, safety, quality, and environmental stewardship.
- Summary of report reissues and feedback received from customers.
- Evaluation of performance metrics for the month and the fiscal year-to-date.
- Status of new method development activities.
- Summary of any unplanned events and occurrences and actions taken to address them.
- Issues affecting Laboratory productivity.
- Evaluation of safety performance (including ISMS metrics, radiological safety performance, and all recordable injuries, lost-time injuries, and near-misses).
- Status of the condition of infrastructure and utilities, including facilities, equipment, and systems, as needed to understand productivity and performance.

The Contractor shall participate in a monthly review with the Contracting Officer and be prepared to address any of the information in the monthly report.

(b) DOE may at any time conduct surveillances, assessments, or audits on any aspect of Contractor activities.

(c) The Contractor shall be responsible for buying any office supplies, office computers, office furniture and other office equipment it needs beyond those provided as described in C.2.1.10.

C.2.1.2 Environmental Compliance and Waste Management

(a) Environmental Compliance

The contractor shall develop and implement an environmental management program to identify, manage, and implement measures that maintain compliance with regulatory requirements. These include, but are not limited to:

- Permitting,
- Environmental reporting,
- Agreements negotiated by DOE with state and local authorities,
- Federal initiatives for pollution prevention, waste minimization, and sustainability (see Section J, List of Applicable DOE Orders, for implementing Orders and Directives), and
- Development of an Environmental Management System (EMS) conforming to ISO 14001.

A list of Applications, Permits, and Notices of Construction applicable to the 222-S Laboratory complex is provided in Attachment J.4. The Contractor's environmental management program shall establish environmental performance objectives, measures, and commitments (POMCs) integrated into the EMS and ISMS. POMCs shall be submitted to DOE as part of the ISMS submittal. The POMCs shall be developed in consultation with the TOC and shall be consistent with the TOC's program. The Contractor's environmental management program shall ensure Contractor activities are integrated within the Hanford site environmental compliance framework. The Contractor shall submit to DOE a description of the EMS and how conformity to ISO14001 will be demonstrated within sixty (60) days of the Notice to Proceed. The Contractor's EMS shall be fully implemented within twelve (12) months of the Notice to Proceed.

The Contractor shall compile the environmental data necessary to comply with the reporting requirements of applicable environmental laws, regulations, DOE and executive orders, and operating permits, and shall provide that data upon request to MSC, TOC, and DOE.

The Contractor shall cooperate with the TOC and MSC to report, track, and address environmental compliance issues affecting 222-S Laboratory facilities. The contractor shall be responsible for resolving issues it causes.

The Contractor is not responsible for establishing and updating facility operating permits; however, the Contractor is responsible for ensuring its activities are compliant with facility operating permits and for providing information and support to the TOC for any modifications the Contractor requires.

(b) Waste Management

Waste management activities at the 222-S Laboratory are the responsibility of the TOC; however, they require close cooperation between the Contractor (as

generator) and the TOC (as disposer) and are governed by procedures maintained by both contractors under frequent consultation with each other. Dangerous Resource Conservation and Recovery Act (RCRA) wastes are disposed in one of two ways. Approved liquid wastes are discharged through designated drains into the 219-S tank system and later transferred to the Hanford Tank Farms for long-term storage. Solid wastes and liquid wastes not approved for discharge into 219-S are accumulated in Satellite Accumulation Areas (SAAs) and 90-day Accumulation Areas (90DAAs) in accordance with state and local codes; most of these wastes are sent to an on-site treatment, storage, and disposal facility, and a small amount is packaged and shipped offsite for treatment. The Contractor is required to comply with all policies and procedures applicable to its activities.

The Contractor is responsible for maintaining SAAs and 90DAAs located in its work areas in a safe and compliant manner. The Contractor shall, when required, place its waste in a bag or lab pack and move it to designated areas within the 222-S Laboratory complex for collection as per TOC procedures. The Contractor shall support the TOC in inspection of SAAs and 90DAAs. The Contractor shall obtain advance TOC approval for each waste stream it generates, and it shall cooperate with the TOC to plan waste disposition. The Contractor shall document the contents of self-generated waste streams and assign waste codes prior to transfer to others.

The Contractor shall cooperate with the TOC in management of non-routine wastes and spills. The Contractor is responsible for cleaning up its own spills.

The Contractor is not responsible for the following work activities: management of the 219-S tank system; designation of the laboratory wastes; determining whether specific waste streams may be brought into or generated within the Lab; discharge of specific waste streams into the 219-S tank system; packaging, collection and disposal of wastes; and janitorial services for offices within the 222-S Laboratory. The Contractor is not responsible for the costs of managing and disposing of waste after it has been collected from 90DAAs, discharged into the 219-S tank system or otherwise removed from the 222-S Laboratory complex.

C.2.1.3 Safety and Health

(a) The Contractor shall at all times assign the highest priority to worker safety and health, and shall never allow either financial or schedule considerations to compromise its commitment to the same. Laboratory work shall be performed by qualified staff in a safe manner using approved procedures and test plans. The Laboratory shall be kept in a clean and well-organized condition to promote a safe environment for workers, prevent leaks and spills, minimize fire risk, and maintain access to emergency equipment.

(b) The Contractor shall establish an Integrated Safety Management System (ISMS), in compliance with the Section I clause, DEAR 970.5223-1 Integration of Environment, Safety and Health into Work Planning and

Execution. Within 15 days of notice to proceed, the Contractor will be provided guidance on the preparation, review, and approval of the Contractor's ISMS. No later than 90 days after notice to proceed, the Contractor shall submit to the Contracting Officer for approval the Integrated Safety Management System Description (Deliverable C-07). Until DOE approves this system, the Contractor shall use the existing ISMS descriptions.

(c) The Contractor shall comply with site-wide safety standards and procedures applicable to its work scope at the 222-S Laboratory. The Contractor shall also comply with DOE-approved worker safety and health programs that are established by the TOC for use at the 222-S Laboratory. Records pertaining to industrial hygiene at the 222-S Laboratory are maintained by the TOC.

(d) The Contractor shall prepare a Worker Safety and Health Plan (Deliverable C-08) for DOE approval as described in the clause in Section H entitled, "Worker Safety and Health Program" within 60 days of the notice to proceed. The Contractor shall designate a single point of contact among its staff who shall liaise with external entities on industrial safety and hygiene and radiological protection.

(e) The TOC is responsible for providing and funding radiological instruments and radiological technicians. Some radiological records are kept by the TOC, MSC, and/or the testing vendor(s); however the Contractor bears the ultimate responsibility for accumulating a complete set of records and making appropriate safety decisions for its employees.

(f) The Contractor shall actively promote a healthy safety culture among management and staff, fostering open communication, a questioning attitude, and trust. It shall provide a means for employees to anonymously raise issues affecting health and safety, and it shall participate in site-wide safety culture assessments and activities. Additional guidance may be found in DOE G 450.4-1C ISMS Guide, Attachment 10, "Safety Culture Focus Areas and Associated Attributes."

C.2.1.4 Quality Assurance

The Contractor shall submit to DOE for approval within 90 days of the notice to proceed a Quality Assurance Program (QAP) Plan (Deliverable C-12) in accordance with EM-QA-001 Revision 1, DOE O 414.1D for nuclear facilities and 10 CFR 830 Subpart A, and in compliance with the site-wide Hanford Analytical Services Quality Assurance Requirements Document (HASQARD). The Contractor shall accept and implement the existing QAP until the Contractor's QAP is approved and implemented. The Contractor's QAP shall implement Parts I and II of the standard American Society of Mechanical Engineers (ASME) NQA-1-2008 with the NQA-1a-2009 addenda, Quality Assurance Requirements for Nuclear Facility Applications and indicate within

the QAP those portions of Parts III and IV that are to be applied to the Contractor's work scope. ASME NQA-1-2008 with the NQA-1a-2009 addenda is the national consensus standard for implementing QA Criteria of 10 CFR 830 Subpart A and DOE O 414.1D. If additional standards are required to address unique/specific work activities, the standards shall be identified within the Contractor's QAP.

The Contractor shall establish and maintain American Industrial Hygiene Association (AIHA) accreditation commensurate with a limited scope of IH analytes and the Washington Department of Ecology accreditation. The Contractor shall participate in applicable performance evaluation (PE) testing programs. PEs are analytical testing programs of samples provided by accredited third party testing laboratories to evaluate the Contractor's analytical capability. The contractor will be required to participate in PE testing programs from several evaluation laboratories.

C.2.1.5 Safeguards, Security, and Emergency Services

The MSC is responsible for the management and execution of Hanford's site-wide Safeguards and Security (SAS) and Emergency Services programs. The Contractor's role is to maintain compliance with site security and emergency services requirements and to participate in the site-wide SAS and Emergency Services programs. Of particular importance is the Contractor's role in safeguarding Category IV accountable nuclear material kept at the 222-S Laboratory. Because the Contractor performs its work using facilities and infrastructures maintained by the TOC, coordination is required with the TOC to meet SAS and Emergency Services requirements. To facilitate the support provided by the MSC and TOC, the Contractor will interface with them in the following areas:

C.2.1.5.1 Safeguards and Security

The Contractor will not process or store classified information. The Contractor may use MSC and TOC safeguards and security procedures, or it may develop its own procedures that comply with site wide programs.

(a) Safeguards and Security Program Management.

The Contractor shall coordinate and interface with the MSC and its subcontractors who provide safeguards and security (SAS) services (e.g., Hanford Site access control, security police officers, vulnerability analysis).

The Contractor shall perform the following SAS program management functions:

- SAS Program Planning, Oversight, and Administration. The Contractor shall identify and coordinate their SAS operational planning activities with MSC operational planning activities on a Hanford Site-wide basis.

- Security Conditions (SECON)
    - The Contractor shall conform to and comply with the DOE Security Conditions (SECON) system.
    - The Contractor shall comply with any protective measure requirements that may be implemented in the event of a crisis or emergency, and/or in response to a malevolent or terrorist threat to any or all DOE facilities, assets, and personnel.
- Site Safeguards and Security Plan and Other SAS Plans. The Contractor shall provide information to the MSC in support of maintaining the Hanford Site Safeguards and Security Plan and other SAS plans.
- Vulnerability Assessments. The Contractor shall provide the necessary operational and technical expertise in support of the preparation of vulnerability assessments, security analyses, and special SAS studies and evaluations as identified by the MSC for the Hanford Site.
- Graded Security Protection (GSP). The Contractor shall implement SAS actions, procedures, and/or processes as assigned by DOE that are necessary to comply with DOE GSP requirements. Overall GSP implementation actions and/or plans shall be consolidated and prepared by the MSC and approved by the DOE.
- Performance Assurance. The Contractor shall provide information on a yearly basis to the MSC to support preparation of the Hanford Site-wide Performance Assurance Program Plan as part of the Site Safeguards and Security Plan.
- Surveys, Reviews and Assessments
    - The Contractor shall provide operational and technical expertise, when requested, to support SAS surveys, reviews, assessments and/or SAS performance tests (e.g., force-on-force exercises) that are conducted by the MSC and/or DOE for SAS program elements.
    - The Contractor shall identify, implement, and close corrective actions for deficiencies in accordance with the SAS corrective action management programs.
- Facility Clearance and Registration. In the event that possession of accountable nuclear material is subcontracted to another entity, the Contractor shall submit all required information to the MSC for facility clearance and registration actions.
- SAS Training. The Contractor shall identify SAS training needs for staff and shall arrange, fund, and schedule training in accordance with applicable requirements.
- SAS Awareness
    - The Contractor shall comply with the requirements of the Hanford Security Awareness Program.
    - The Contractor shall maintain awareness of Hanford Site wide security issues/topics and incorporate them

into the Contractor's internal practices and procedures, as appropriate.
    - The Contractor shall implement supplementary SAS awareness activities and/or briefings (e.g., at staff and safety meetings) in coordination with Site-wide policies.
- Deviations
    - The Contractor shall identify, evaluate, and submit deviations to SAS requirements to DOE.
    - The Contractor shall coordinate with the MSC prior to submitting deviations to DOE. Deviation requests shall be applicable and unique to the project/program scopes of work, and submitted only when other means to meet requirements would not meet DOE's SAS program objectives.
- Incidents of Security Concern
    - The Contractor shall develop and implement procedures and processes consistent with DOE requirements for addressing incidents of security concern. The Contractor shall provide information and facility access to the MSC for investigation of security incidents. The Contractor shall develop and implement corrective actions to address investigation findings.
    - The Contractor shall provide information to MSC to support the administration of the Hanford Site Security Infraction Program.

(b) Physical Security

- The Contractor shall comply with the MSC security plans and DOE security plans/requirements.
- The Contractor shall support the MSC in the development or updating of facility asset protection agreements for facilities and shall conduct operations consistent with the agreements.
- The Contractor shall be responsible for any physical security requirements/upgrades and associated costs to Contractor owned facilities.
- The Contractor is not responsible for physical security requirements/upgrades for Government furnished facilities.
- The Contractor shall submit, through MSC for DOE review and approval, any SAS arrangements or changes prior to operations commencing, or changing operations, or configurations that might alter the performance of existing SAS systems (e.g., limited/protected area boundaries, physical security configurations and associated hardware [sensors/cameras], patrol coverage and responses, safeguards methods or boundaries, entry/access control systems/procedures).

(c) Protective Forces

The protective forces function is comprised of select security elements (armed personnel, specialized equipment, tactical procedures, etc.) associated with physically protecting people and property on the Hanford Site. The MSC is responsible for all protective forces activities; however, there are many areas of facility operations management that interweave with the 222-S Laboratory. The MSC Protective Forces function serves DOE, all Hanford Site contractors, and in particular facilities possessing critical safeguards and security interests, e.g., special nuclear material (SNM).

- The Contractor shall work with MSC Protective Forces to protect SNM, industrial assets, and mitigate and deter radiological and toxicological sabotage events at the 222-S Laboratory.
- The Contractor shall manage their activities consistent with DOE-RL and DOE-ORP approved risk and vulnerability assessments, the Site Safeguards and Security Plan, and other security plans and facility asset protection requirements coordinated by the MSC that involve the use of Protective Forces.

(d) Information Security

The Information Security program encompasses the identification and protection of sensitive and classified information and matter. The Information Security scope shall include, but is not limited to: Sensitive Information Management (e.g., OUO), and Operations Security (OPSEC).

The Contractor shall perform the following information security functions:

- Operations Security
    - The Contractor shall participate in and support Hanford Site-wide OPSEC Working and Awareness groups and perform the necessary management and support functions required for an effective OPSEC program.
    - The Contractor shall provide support to the MSC OPSEC assessments of all Hanford Site facilities that have the potential to process or store classified or sensitive information.
    - The Contractor shall support the annual Site OPSEC threat assessment and preparation of the annual OPSEC plan.
- Official Use Only (OUO). The Contractor shall manage and implement an OUO information program consistent with the common Hanford Site-wide OUO information program policies including the following:
    - Provide OUO education and awareness for all staff; and

- Review documents released to the public or assigned a formal document number for OUO content.

(e) Personnel Security-Badging

The MSC manages and conducts a centralized Personnel Security-Badging program for the Hanford Site on behalf of DOE.

- The Contractor shall obtain badging services from MSC
- The Contractor shall support MSC's processes for obtaining security badges, keys, proximity cards, etc., from terminating employees and support the MSC in removing such individuals from automated access control systems.

(f) Workplace Substance Abuse Programs

The Contractor shall comply with requirements outlined in 10 CFR 707, Workplace Substance Abuse Programs (WSAP) at DOE Sites.

(g) Services shown as "Direct-Funded" will be paid for directly by DOE.

(h) Unclassified Foreign National Visits and Assignment (FNVA)

- The Contractor shall notify the MSC of potential foreign visitors or employees, prepare and submit security plans to the MSC for foreign national visitors to the Hanford Site before approval of the visit/assignment.
- The Contractor shall require FNVA training for Contractor personnel who host FNVAs.
- The Contractor shall conduct FNVA in compliance with approved security plans.

(i) Foreign Travel

The Contractor shall administer Official Foreign Travel in accordance with applicable DOE Orders, submitting all official foreign travel requests packages to DOE-ORP for review and subsequent submittal to DOE-HQ for approval in accordance with established timeframes prior to any official foreign travel. Notification to CO and approval by CO before being submitted to HQ is required for any foreign travel.

(j) Nuclear Material Control and Accountability (MC&A)

The MSC manages and conducts a centralized MC&A program for the Hanford Site on behalf of DOE. The Contractor shall perform the following

MC&A Functions:

- Assign an individual that will serve as the Contractor's MC&A single point-of-contact, independent of line operations, with the responsibility and authority to affect implementation of MC&A requirements. This individual shall work with the Hanford Site MC&A management official within the MSC to provide oversight of accountable nuclear material in possession of the Contractor.
- Support the MSC in preparation and maintenance of a Hanford Site-wide MC&A plan, administration of treaty related activities (e.g., IAEA), performing safeguards occurrence investigation and reporting, scheduling of periodic inventories consistent with the Contractor's project work schedules.
- Identify personnel requiring MC&A training provided by the MSC and coordinate training schedules with the MSC.
- Conduct on-the-job MC&A training specific to 222-S Laboratory facilities and systems.
- Request from the MSC:
    - Final authorization to move, ship, process, or store nuclear materials, including approval of shipper/receiver plans;
    - Final approval of Material Balance Area (MBA) Custodians; and
    - Final determination of MBA categorizations; and
    - Final approval of MC&A-related implementing procedures.

- Respond to MSC or DOE calls related to the MC&A program.

The Contractor shall coordinate and integrate all aspects of its MC&A activities with the MSC. The Contractor shall utilize the MSC for:

- MC&A requirement interpretation with overall responsibility for the MC&A program;
- Training and qualification of all personnel performing MC&A functions (with the exception of specific facility/system on-the-job MC&A training);
- Nuclear materials accounting and reporting requirements for all nuclear materials both active and inactive (e.g., "V-RIS") and be responsible for the official nuclear material inventory, including discrepancy reconciliation;
- Statistical Services needed for managing nuclear material;
- Purchasing, regulating, and managing MC&A-controlled forms and tamper indicating devices; and
- Nuclear materials measurement system approvals and measurement system control requirements for all MC&A nuclear materials measurement activities (e.g., monitoring

measurement control information; collecting and analyzing measurement control information; calculating control limits and monitoring equipment performance against those limits, etc.).

The Contractor shall integrate MC&A requirements with other plans, projects/programs, and activities at all life-cycle stages and inform the MSC of such. The Contractor shall proactively take into account MC&A requirements, systems, and technologies in the planning, design, construction, and operation of new or renovated DOE facilities and activities.

C.2.1.5.2 Emergency Services

The TOC maintains the Emergency Management Program at the 222-S Laboratory, interfacing with and training Contractor support staff at the laboratory. The Contractor shall proactively support the TOC Emergency Preparedness Coordinator in development, implementation, assessment, and testing of the Emergency Management Program, including participation in the annual Emergency Preparedness assessment. The Contractor shall designate an individual on its staff to serve as point of contact for emergency preparedness, shall provide a representative at the DOE Emergency Operations Center during emergencies affecting the 222-S Laboratory, and shall designate three or more individuals qualified as members of the Facility Emergency Response Organization. The Contractor shall provide staff to serve as observers, controllers, and /or evaluators during emergency preparedness drills. The Contractor shall provide qualified Building Emergency Directors and/or other trained emergency preparedness response staff on an as-needed basis to support day shift emergency management needs.

The MSC manages and conducts the Fire Services for the Hanford Site. This includes wild land fire, structural fire, and ambulance emergency response. Also included, are activities, such as, hazardous material and chemical/biological/ radiological emergency response, pre-fire planning, site-wide respiratory protection services, and the testing and maintenance of life safety fire protection systems in designated facilities. The Contractor shall support facility access to the MSC fire services personnel, and notify the Fire Department of work activities, events, and incidents that may require Fire Services involvement and/or response (e.g. emergency medical assistance, hazardous or radiological emergency help, etc.).

C.2.1.6 Interface Management

Numerous interfaces exist between the Hanford Laboratory Services Contractor, MSC, PRC, TOC, other Hanford Site contractors, and the DOE Offices. Because the Contractor shares facilities with the TOC and the bulk of analyses are performed for the TOC, the interface between the Contractor and the TOC is of particular importance. The following paragraphs describe general features and requirements for Contractor interface management:

(a) A site-wide plan (MSC-IMP-00001 Hanford Site Interface Management Plan) signed by the PRC, MSC, and TOC provide a framework for inter-contractor relations and establishes interface-related processes. The Contractor may, at its option, participate in the various boards, teams, and committees established by the Hanford Site Interface Management Plan subject to the rules established by those groups.

(b) The Contractor, in the course of fulfilling its obligations under this Contract, will provide services to, or receive services from, other Hanford Site U.S. Department of Energy (DOE) prime contractors. Section J, Attachment J.3 entitled, Hanford Site Services and Interface Requirements Matrix (Matrix) identifies the service provider and the associated general interface obligations. The Matrix is not an all-inclusive listing of services that may be required or provided; however; all services provided to another contractor shall fall within the scope of the provider's contract.

Individual interfaces are established and managed through various controlling agreements such as Interface Control Documents (ICDs), Memoranda of Agreement/Understanding (MOA/MOU), Administrative Interface Agreements, and Service Level Agreements. At a minimum, controlling agreements shall define:

- The interface and/or the services work request elements, and service levels (quantity and delivery rates);
- If applicable, the method and timing for charging costs associated with the service and the payment methods; and target performance measures for meeting required service levels;
- Decision process and a robust dispute resolution process; and
- Clear delineation of roles, responsibilities, accountabilities, and authorities.

(c) Services are identified in the Matrix as either "Mandatory," or "Optional."

- "Mandatory" services, if needed by the Contractor, shall be obtained by the indicated provider. If, for any reason, a provider of a mandatory service cannot provide the required service to meet the requesting contractor's needs, the requesting contractor must obtain Contracting Officer approval prior to obtaining the services from any other source.
- "Optional" services are non-compulsory.
- If the Contractor believes it is in DOE's interest to change a "Mandatory" service to "Optional" so that it may be self-performed or procured from a different source, the Contractor shall propose this change to the DOE Contracting Officer,

providing a written justification showing the benefits of the change and the describing impacts to all parties to the interface. If, at the unilateral discretion of the Contracting Officer, the decision is made to implement the proposed change, the change will not take effect until the Contractor receives Contracting Officer direction to implement the change. Contracting Officer rejection or delay of a proposed change shall not be the basis for a Request for Equitable Adjustment (REA) or subject to the Section I Clause entitled, FAR 52.233-1, Disputes – ALT I (DEC 1991).

(d) The Contractor shall resolve interface-related issues as agreed within individual service delivery agreements or using the process described in the Hanford Site Interface Management Plan. If these are unsuccessful, the Contractor may elevate the issue to the Contracting Officer. The Contractor shall, with coordination and adequate preparation, allow service-providing contractors access to its work areas to perform agreed-upon services. The Contractor shall coordinate with the TOC to ensure that any work performed within the 222-S Laboratory by other contractors is within the facility Technical Safety Requirements and operating permits.

(e) In cooperation with the TOC, the Contractor shall respond to annual requests for input to the Infrastructure and Services Alignment Plan (ISAP) and the Annual Forecast of Services and Infrastructure.

(f) Fee-for-Service providers shall provide to DOE and make available to users an adequate basis for liquidation of the charge for usage-based, "Mandatory" services. Service rates will be developed by the providers based upon customer-projected usage and may be subsequently adjusted to account for unplanned changes in demand.

(g) Contractors retain the responsibility to reach agreement on interfaces and for the appropriate delivery of services. The Government makes no guarantees or warranties regarding the delivery of services, and services between contractors shall not constitute government-furnished services or government-furnished information. The Government shall not be held responsible for the delivery or non-delivery of services between Hanford Site contractors. Contractors shall resolve any disputes regarding service interfaces and the provision of services among themselves. If contractors are unable to achieve a timely resolution of issues between themselves regarding interfaces or the appropriate delivery of services, contractors may seek direction from the Contracting Officer. DOE shall be the exclusive authority for resolving disputes associated with any interface issues that cannot be resolved between parties in a timely manner. Any litigation undertaken by the Contractor to resolve disputes over services is at the Contractor's own risk.

C.2.1.7 Records Management

The Contractor shall establish, within 60 days of the notice to proceed, a Records Management Plan (Deliverable C-11) in accordance with applicable laws and DOE Orders. All records (see 44 USC 3301 for statutory definition of a record) acquired or generated by the Contractor in performance of this contract, except for those defined as contractor-owned (see Section I, DEAR 970.5204-3, Access to and Ownership of Records), including records from the predecessor contractor and records described by the contract as being maintained in Privacy Act systems of records, shall be the property of the Government.

C.2.1.8 Training

The Contractor is responsible for establishing, implementing and maintaining a training program to ensure that all employees are qualified to perform their assigned duties. The training program shall be in accordance with DOE Orders for nuclear facility operations. The Contractor shall maintain records documenting the qualification and certification of its personnel.

The TOC provides required facility specific-training at no charge. Attachment J-3 identifies other training that the Contractor is required to purchase from the MSC and provide to affected employees.

C.2.1.9 Contract Transition

(a) Upon Contracting Officer (CO) issuance of the Notice to Proceed, the Contractor shall begin transition from the incumbent provider of laboratory services for a period of two (2) months. During the transition period, the incumbent contractor will be responsible for delivery of laboratory services. The Contractor shall assume full responsibility for delivery of laboratory services as approved by the CO at the end of the transition period.

(b) During the transition period as specified in the clause in Section F entitled "Period of Performance," the Contractor shall perform those activities that are necessary to transition work from the incumbent contractor in a manner that:
    - Assures that all work for which the Contractor is responsible under the contract is continued without disruption;
    - Provides for an orderly transfer of resources, responsibilities, and accountability from the incumbent contractor; and
    - Assures that when the transition period is complete the Contractor is ready to perform the work in an effective, compliant, and safe manner.

(c) The Contractor is responsible for securing its own personnel and logistical support (office space, computers, telephone, etc.) during

the transition period unless specifically directed otherwise by the Contracting Officer.

(d) The Contractor shall submit a Transition Plan (Deliverable C-01) to the Contracting Officer for approval within seven days after notice to proceed. The plan shall include a schedule of major activities, and at a minimum will address:

- Communication process among DOE, the incumbent Contractor, assigned subcontractors, incumbent employees, other Hanford Site contractors, and site tenants;
- Identification of key transition issues and milestones;
- Identification of a transition team (inclusive of consultants and teaming members, if any);
- Integration of work packages (direct and indirect) and Service Level Agreements from the incumbent contractor;
- Approach to minimizing impacts on continuity of operations;
- Assumption of laboratory operations;
- Human resource management;
- Implementation plan for the management systems (procedures, plans, guides, instructions, operator aids, and other controlled documents) required to accomplish the scope of Sections C.2.1 and C.2.2.
- Development of all interface control documents identified in Section C.2.1.6;
- Preparation of the Quality Assurance Program Plan (Deliverable C-12) and submission for DOE approval;
- Establishment of an invoicing system that is acceptable to the CO;
- Assumption of existing procedures; and
- Assumption of permits, applications, licenses, and other regulatory documents.

(e) The Contractor shall provide a Communications Plan (Deliverable C-10) to the Contracting Officer within seven days of receiving Notice to Proceed and update it on an as-requested basis. The Communications Plan shall address the following:

- Internal and external communications during contract award and transition
- Internal Communications (establishing a point of contact and a protocol for receiving and forwarding site wide information to employees)
- External Communications (establishing a point of contact and a protocol for receiving inquiries and doing external outreach)

(f) Within seven days of notice to proceed, the Contracting Officer will provide to the Contractor a list of all incumbent personnel.

(g) The Contractor shall provide in-process verification of Contract transition through weekly written Transition Status Reports (Deliverable C-02).

(h) The Contractor and the incumbent contractor shall jointly reconcile the government property inventory and provide a written reconciliation of to the Contracting Officer (Deliverable C-06, Physical Inventory Report) within 60 days of the notice to proceed. This information shall be used to provide a baseline for this contract and for closeout of the predecessor contract.

(i) The Contractor shall develop the inter-contractor ordering and financial agreements as defined by the Section J, Attachment J.3 entitled, Hanford Site Services and Interface Requirements Matrix and Service Level Agreements defined by Section C.1.2.5 that are necessary to support Transition and Contract performance.

(j) The Contractor shall prepare a Property Management Plan (Deliverable C-04) within 60 days of the notice to proceed, to be updated as needed.

(k) The Contractor shall prepare an Assurance System Description (Deliverable C-15) within 60 days of the notice to proceed, to be updated as needed.

(l) After completion of the transition activities contained in the approved transition plan and such other transition activities as may be authorized or directed by the Contracting Officer, the Contractor shall notify the Contracting Officer in writing that it is ready to assume full responsibility for the work (Deliverable C-14). Upon written approval from the Contracting Officer, the Contractor shall assume full responsibility for the work the day after the end of the transition period specified in Section F.03, Period of Performance.

C.2.1.10 Government Furnished Facilities, Property, and Services

The Contractor will be provided with facilities, programs, and services to accomplish its mission. A detailed listing of services and information is given in Section J, Attachment J.3 entitled, Hanford Site Services and Interface Requirements Matrix (Matrix). The Contractor shall integrate these services with the analytical services scope.

The Contractor is encouraged to review the Facilities, Equipment and Services during the contract period and make recommendations for improvements or changes that will effect cost savings to the government and/or benefit DOE's cleanup mission at the Hanford site. Facilities and analytical equipment will be available and maintained as described below.

C. 2.1.10.1 Facilities

The 222-S complex consists of the 222-S Building, a 70,000 square foot laboratory facility, which includes 11 hot cells for handling and analyzing highly radioactive samples, and the auxiliary buildings that support the analytical chemistry mission. The analytical services will be primarily performed at the 222-S Building with nearby office spaces available for use by laboratory personnel.

C.2.1.10.2 Instrumentation

The types of laboratory equipment available to the Contractor are listed below.

Sample Preparation Equipment:

- Liquid/liquid extractors
- Acid digestion apparatus
- Water digestion apparatus
- Microdistillation apparatus

Inorganic Instrumentation:

- Inductively Coupled Plasma/Mass Spectrometer systems (ICP/MS)
- ICP/AES (Atomic Emission Spectrometer systems)
- Differential Scanning Calorimeters (DSC)
- Ion Chromatographs (IC)
- Thermal Gravimetric Analyzers (TGA)
- pH on Specific Electrodes
- Titration Equipment

Organic Instrumentation:

- Total Organic Carbon analyzers
- Gas Chromatographs
- Gas Chromatograph/Mass Spectrometers (GC/MS)
- Spectrophotometer

Radiochemistry Instrumentation:

- Liquid Scintillation Counters
- Alpha/Beta Proportional Counters, and
- Gamma (GEA) and Alpha Energy Analyzers (AEA)

There are 11 hotcells and 33 remote manipulators available within the 222-S Laboratory. Of these, 3 hotcells in the 11A facility and their manipulators are available for use by the Contractor.

The Contractor shall provide oversight and vendor support for the repair of instrumentation at the 222-S Laboratory.

The oversight and vendor support is to include the following:

- Define routine/preventative maintenance needs for instrumentation utilized by WHL at 222-S and communicate needs to the TOC, to be included in vendor agreements. *(Subject to WRPS funding authorization level)*
- Submit orders to TOC for the procurement of instrument parts and consumables.
- Assist and act as the host/escort for all vendors in relation to analytical instrumentation utilized by WHL personnel which includes 222-S entry/access controls.
- Communicate directly with vendors in relation to all aspects of routine, preventative, and corrective maintenance needs for instrumentation utilized by WHL at 222S. This will include communicating all analytical troubleshooting that was completed as well as any internal corrective maintenance activities performed.
- Provide documentation to WRPS of scheduled service visits by vendors (including scope).
- Responsible to maintain instrument maintenance logs for instrumentation utilized by WHL at 222-S. WHL will share this information with WRPS.
- Develop and maintain instrument status matrix and provide WRPS access to the matrix.
- Define, within the first six months of assuming work, a spare parts inventory to be procured and maintained by WRPS for instrumentation utilized by WHL at 222S, including a list of critical spare parts. *(Subject to WRPS funding authorization level)*
- WRPS will maintain the spare parts inventory. WHL will work to develop a predictive maintenance program for instrumentation utilized by WHL at 222-S which will identify/anticipate maintenance needs based on instrument utilization and ultimately result in efficiencies over routine/time-based preventative maintenance.
- WHL responsibilities in relation to routine, preventative, and corrective maintenance internally within 222-S will include the following:
    - Define routine/preventative maintenance needs for instrumentation utilized by WHL at 222-S and communicate needs to WRPS maintenance and operations manager.
    - Monitor and document routine/preventative maintenance schedule for execution of maintenance scope by WRPS staff.
    - Submit orders to WRPS procurement of instrument parts and consumables. WHL will be responsible for tracking status of parts ordered.
    - Complete internal/external work request orders to track instrument needs for troubleshooting (WHL) and maintenance (WRPS).
    - Complete all analytical troubleshooting and user level maintenance to the extent that either a vendor visit is required or WRPS maintenance staff (BU) is needed.
    - Attend planning meetings and pre-job briefs in relation to instrumentation utilized by WHL at 222S.

- Support WRPS maintenance staff in relation to the execution of work packages on instrumentation utilized by WHL at 222S related to routine, preventative, and corrective internal maintenance.
- Responsible to maintain instrument maintenance logs for instrumentation utilized by WHL at 222S. WHL will share this information with WRPS.
- Develop and maintain instrument status matrix.

All needed maintenance outside this statement of work will be provided at no charge to the Contractor.

C. 2.1.10.3 Information and Telecommunications Technology, Software, and Support

Electronic databases used for administration of the laboratory operations work scope will be turned over to the Contractor at transition. The Contract shall be provided with access to the software programs listed in Attachment J.13.

Issued computers and their operational costs will be provided at no cost to the Contractor. All Government issued equipment shall either be paid for by the TOC as provided in the contract J.3 Table "Hanford Site Services and Interface Requirements Matrix, or shall be reimbursed as a direct material cost to CLIN 20. No markups or fees shall be included in the direct material price.

Computer work stations including basic software (Windows operating system, Microsoft Office, anti-virus protection, and Hanford site applications required for lab operation), networking with the Hanford Large Area Network (HLAN), file storage areas, and associated support will be provided at no charge to the Contractor. The Contractor is responsible for any workstations added above the existing configuration, for peripheral equipment such as printers and scanners installed in individual offices, for its own business administrative software systems (compliant with Hanford Site requirements), and the cost of any additional software

The Contractor will be provided with a telephone network and associated desktop units. The Contractor is responsible for telephone usage charges and for costs associated with any changes to the telecommunications configuration.

Any Non-Government furnished items brought into the Government-owned or leased facilities are at the Contractor's own risk.

C. 2.1.10.4 Supplies and Equipment

Laboratory equipment, chemicals, and supplies are provided by the TOC at no charge to the Contractor. Purchases are made through DOE-approved vendors. The TOC maintains the Approved Chemical Suppliers List.

Thermoluminescent dosimeters and associated record-keeping, and bioassay services and records, are provided for a fee as described in Attachment J-3,

Interface No. 32. Area monitoring, clothing and dosimetry for short-term (daily) use, and personnel contamination monitoring are direct-funded by DOE and provided by the TOC and MSC. Personal protective equipment that is not customized to the user, for example clothing, is provided at no charge. Respiratory protection equipment, including fitted masks, is also provided at no charge, (although mask fitting is not a government furnished service; see Section J, Attachment, entitled, Hanford Site Services and Interface Requirements Matrix (Matrix)). The Contractor is responsible for purchasing any other custom or specially-fitted clothing and equipment required by its employees, including prescription safety glasses, boots/shoes, and ergonomic office equipment.

C. 2.1.10.5 Government Furnished and Other Available Services

The Contractor shall coordinate with service providers (other site contractors) using processes established by those providers to request needed services.

TOC provides radiological control and industrial hygiene technicians who support maintenance and operations at the 222-S Laboratory. The radiological control and industrial hygiene technicians' priorities are established monthly, weekly, and daily by TOC based on agreed upon maintenance and operational activities.

The TOC and other Hanford site contractors provide and maintain software specific to the 222-S Laboratory or used by all Hanford site contractors. The software provided and maintained includes laboratory instrument controller software, Hanford site access training records, Industrial Hygiene (IH) monitoring records, medical records of services performed by the Hanford medical provider, and employee dosimeter and dose records. The contractor is responsible for any additional databases and software programs they deem necessary to manage staff training requirements for laboratory equipment and analysis, compliance with environmental regulations, and protection of the safety and health of its employees.

TOC maintains the nuclear safety basis for the 222-S Laboratory including the Documented Safety Analysis (DSA) and Technical Safety Requirements (TSR) which are provided in Section J, Attachment J.6. TOC performs facility maintenance and provides those utilities as are normally required for operation of an analytical laboratory.

DOE will directly pay the fee for the Contractor's required medical support for Hanford badged employees assigned to this contract. Medical support services are provided by the site Occupational Medical Services Provider and include walk-in medical consultation and first aid, occupation-related medical monitoring examinations, ergonomic assessment, services associated with the beryllium medical program, influenza vaccinations, behavioral health services, health education, and case management. The Contractor is responsible for any costs associated with missed appointments (No Shows).

DOE will directly fund services as indicated in Attachment J.3. The DOE Employee Concerns Program (ECP) is available to Contractor staff without charge to the Contractor although the Contractor is still required to maintain its own ECP in accordance with H.20 entitled, "Employee Concern Program." (Deliverable C-09).

The MSC provides fee-based services as described in Section C.2.1.6 and Section J, Attachment J.3.

C.2.1.10.6 Hanford Site Data Systems

The Contractor shall be provided access to, and where applicable shall use the software systems listed in Attachment J.13 and other software systems as may be necessary to coordinate information exchange with customers and interface partners. The Contractor is not responsible for maintenance and updates of listed software except where noted. The Contractor is responsible for maintaining and updating any software it implements in the 222-S Laboratory.

C.2.1.11 Contract Closeout

At the completion of the Contract, the Contractor shall cooperate with DOE and assist the incoming contractor(s) to facilitate an overall effective and seamless transition. The desired outcome is a smooth transition of work scope from the Contractor to other contractors to avoid disruptions that could impact accomplishing the Hanford Site mission.

(a) The Contractor shall perform contract closeout activities in preparation for the transferring of responsibility for performing work scope to another contractor. These activities include:

- Gathering of LA&TS accreditations and their corresponding actionable dates
- Beginning the archive inventory process
- Gathering of interfaces with outside organizations (e.g., services)
- Reviewing the J.3, Hanford Site Services and Interface Requirements Matrix
- Reviewing software programs and licenses that will be transferred
- Reviewing physical property and its corresponding location
- Reviewing interface(s) to determine procedures pertaining to overlapping any scope
- Gathering schedules for active projects
- Reviewing any necessary travel that may be required for transition
- Ensure property, Government property and Government-furnished property associated with the scope of work being transferred is accounted for, with the

current condition documented. Provide the results to DOE in a Comprehensive Property List (Deliverable C-18)

• Assess the current conditions of elements of the contract associated with the scope of work being transferred and provide DOE with a report presenting this assessment (Deliverable C-19)

• Provide in-process verification of outgoing contract transition through weekly status meetings

• Coordinate with the contractor assuming responsibility for performance of work in transference of workforce, subcontracts, property, programmatic and management system functions

• Support DOE in conducting a safe, effective, and efficient transfer of responsibility for execution of the work scope, resulting in the different contractor assuming full responsibility for the project and workforce with no disruption to ongoing operations

• Support the Transfer Agreement to the incoming contractor

(b) The Contractor shall submit an outgoing Transition Plan (Deliverable C-17) to the Contracting Officer for approval. The plan shall include a schedule of detailed activities, and at a minimum will address the following:

• Work structure to describe the details necessary to ensure all activities are planned, scheduled, executed, and documented effectively

• Team structure to describe members and assigned roles, responsibilities, accountabilities, and authorities

• Communication process among DOE, the incoming contractor(s), assigned subcontractors, Contractor employees, other Hanford Site contractors, and/or site tenants

• Operations to describe any proposed changes including, but not limited to, staffing, work execution, and/or business practices

• Turnover and acceptance process used to reconcile and confirm all information has been transferred to the incoming contractor, and recorded for documentation

C.2.2 SURGE ANALYTICAL SERVICES (LABOR HOUR SCOPE)

This section is to be used when a "surge" occurs which requires increased labor hours and/or the addition of more staff. Such work is identified as Labor-Hour scope and may be triggered by the following:

- Negotiation of one or more Service Level Agreements with customers that exceed the capacity of Lab staff described in Attachment J-12, when need-by dates do not allow for any reasonable resource-leveling strategy.
- An emergent event requiring analytical support in excess of expected levels.

Even when the workload does not exceed the capacity of Lab staff in Attachment J-12, the CO may nevertheless authorize use of this section under special circumstances.

Each request for authorization under this section shall be approved by the Contracting Officer prior to the work being performed. Work surge will not be authorized if the Contractor staff assigned to Section C.2.1 work scope is not in accordance with the Contractor's Staffing Plan in Section J, Attachment J.12.

C.2.3 PENSIONS AND OTHER BENEFIT PLANS (COST REIMBURSEMENT SCOPE)

The Contractor shall manage pensions and other employee benefit plans in accordance with the Section H clauses entitled "Pension and Benefit Plans" and "Post-Contract Responsibilities for Pension and Other Benefit Plans".

ATTACHMENT C.1 REQUIRED LABORATORY PROCESSES AND ANALYSES

Processes

- Sample Breakdown
- Homogenize Sample
- Centrifuge Sample
- Composite Sample
- Bulk Density
- Volume of % Centrifuged Solids
- Liquid Weight
- Solid Weight
- Volume of Solid
- Acid Digest for ICP/AA/Radiochemistry
- Water Digest for ICP/AA/Radiochemistry
- Fusion with KOH
- Solvent Extractions
- Water Digest (no acid)
- Quality Control Standards, Blanks and Calibration Samples
- SVOA sample preparation
- Core sample extrusion

Base Analyses

Inorganic, Physical Analyses, Total Organic Carbon

- Ammonium by Ion Chromatography (IC)/Cations by IC
- Endotherm and Exotherm Analysis by TGA DSC
- Iso Uranium by ICP/Mass Spectrometry(MS)
- Density
- % Water by Thermo Gravimetric Measurement
- Anions by IC
- ICP Acid Digest/Routine Analysis
- Total Organic Carbon by Persulfate/Coulometry
- Hg and NH3 Tube Analysis by
- Actinides and IH metals by ICP
- CN and Cr(VI) by Spectrophotometry
- pH, OH and S by ISE

Organic Analyses

- PCB Sample Preparation
- PCB Analyses (SW846 8082)
- Volatile Analyses (SW846 8260)
- Semivolatile Analyses (SW846 8270)
- Total Carbon/Total Organic Carbon by Combustion Furnace

Thermal Desorption Unit

- Inorganic, Physical Analyses, Total Organic Carbon
  - Hg by cold vapor atomic absorption spectrometry (CVAAS), and NH3 Vapor Tube Analysis by Thermal Desorption Unit (TDU) Ion Chromatography (IC)

- Organic Analyses
  - SVOA, VOA, FURAN Tube Analysis by TDU/GC-MS

SUMMA Canisters

- Passivation treatments
- Canister cleaning
- Canister re-evacuation

Radionuclide Analyses

- Alpha in liquid sample
- Am-241, Cm-243 by TRU-SPEC Resin
- Pu-238, 239 by TRU-SPEC Resin
- GEA, AEA
- Alpha/Beta and Liquid Scintillation Counters
- Sr-89,90 High Level
- I-129, N-63, H-3, Se-79 and Tc-99

Data Reporting

- Full Data Package
- Summary Data Package
- Summary Data Package with Quality Assurance and TCD Upload
- HEIS and ABCASH uploads