

Part I – The Schedule

Section C

Performance Work Statement

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Hanford Mission Essential Services Contract Overview

Contract Purpose and Overview

The purpose of the Hanford Mission Essential Services Contract (HMESC)¹ is to provide direct support to the U.S. Department of Energy (DOE) and its contractors with cost-effective infrastructure and Site services that are integral and necessary to accomplish the environmental cleanup mission. The scope includes eight (8) primary Contract Line Item Numbers (CLIN) for the base and option periods, as applicable: 1) Contract Transition, 2) Hanford Site Benefit Plans, 3) Legacy Benefit Plans, and Legacy Workers' Compensation, 4) Infrastructure and Site Services General Requirements, 5) DOE Small Business Procurement Pre-Award Support, 6) Usage-Based Services (UBS) to be Provided to Other Hanford Contractors (OHC), 7) Infrastructure Reliability Projects, and 8) DOE Small Business Procurement Post-Award Support and Other Directed Work Scope (see Figure C-1 for Work Breakdown Structure [WBS] by CLIN). In addition to this work scope, the Contractor shall play a key role in ensuring that interfaces with and between Hanford Site customers (DOE Offices and OHCs) that affect their scope of work are managed in a manner that encourages open and proactive communication, collaboration, and cooperation.

The term Hanford Site does not include lands for federal property managed as part of the Manhattan Project National Historical Park (MAPR) (see Section J Attachment entitled, *Manhattan Project National Historical Park Description*, for MAPR description). While the MAPR (and MAPR contractor) may receive some services, at DOE discretion, MAPR is separate from the cleanup mission and is not subject to Hanford Site requirements. For purposes of this Performance Work Statement (PWS), MAPR is not considered an OHC.

Organization of the PWS

The PWS work scope elements are further organized into the following sections:

- Key Customers – Lists the primary users of the products and services required by the Section C entitled, *PWS*.
- Scope and Requirements – Provides an in-depth description of the performance-based Contract requirements including deliverables, necessary tasks, actions, functions, or activities to be performed.
- Boundaries, Constraints, and Interfaces – States limits or exclusions to the scope of the required activities, describes conditions or factors that restrict freedom of action by the Contractor, and provides interface requirements with others.

¹ Hereafter, HMESC may be referred to as the Contract or the Contractor, as applicable.

HANFORD MISSION ESSENTIAL SERVICES CONTRACT
 CONTRACT NO. 59303320CEM000058

General Requirements						
<p>CLIN 0001 Contract Transition</p> <p>CLIN 0002 Hanford Site Benefit Plans</p> <p>Responsibilities for Sponsorship, Management & Administration of Contract Employee Pension and Other Benefit Plans</p>	<p>CLIN 0003 Legacy Benefit Plans & Legacy Workers' Compensation</p> <p>Responsibilities for Legacy Post-Retirement Benefit Plans, and Legacy Workers' Compensation</p>	<p>CLIN 0004 Infrastructure & Site Services General Requirements</p> <p>Infrastructure and Site Services</p> <p><i>See Below</i></p>	<p>CLIN 0005 DOE Small Business Procurement Pre-Award Support</p>	<p>CLIN 0006 Usage-Based Services to be Provided to Other Hanford Contractors</p>	<p>CLIN 0007 Infrastructure Reliability Projects</p>	<p>CLIN 0008 DOE Small Business Procurement Post-Award Support and Other Directed Work Scope</p> <ul style="list-style-type: none"> • DOE Small Business Procurement Post-Award Support • Other Directed Work Scope
<p>Utilities & Infrastructure</p> <ul style="list-style-type: none"> • Electrical Transmission and Distribution, and Energy Management • Water System • Sewer Systems • Sanitary Waste Management and Disposal • Roads and Grounds • Railroad System 	<p>Transportation</p> <ul style="list-style-type: none"> • Motor Carrier Services • Fleet Services • Crane and Rigging 	<p>Safeguards & Security</p> <ul style="list-style-type: none"> • Protective Forces • Physical Security Systems • Information Security • Personnel Security • Nuclear Materials Control and Accountability • Safeguards and Security Program Management 	<p>Emergencies & First Responders</p> <ul style="list-style-type: none"> • Fire and Emergency Response Services • Emergency Operations • Radiological Assistance Program 	<p>Training & Workforce Readiness</p> <ul style="list-style-type: none"> • Volpentest HAMMER Federal Training Center 	<p>Information Technology & Management</p> <ul style="list-style-type: none"> • Information Technology Core Services • Cyber Security • Information Technology Infrastructure • End-User Computing Services • Communications • Mission Information Technology • Records Management • Correspondence Control • Multi-media Services • Site Forms Management 	
<p>Business Services</p> <ul style="list-style-type: none"> • Personal Property Management Program • Energy Employees Occupational Illness Compensation Program Act Support • Hanford Workforce Engagement Center • External Affairs • Courier Services • Mail Services • Reproduction Services • DOE Receptionists • Site Safety Standards - Common Safety Processes 	<p>Real Property Asset Management</p> <ul style="list-style-type: none"> • Planning and Budgeting • Conduct of Maintenance • Facilities Information Management System (Reporting Systems) • General Purpose Facility Planning and Management 	<p>Environmental Stewardship & Management</p> <ul style="list-style-type: none"> • Land Management • Site Access and Use • Post-Cleanup Surveillance and Maintenance • Tribal Nations • Hanford Natural Resource Damage Assessment 	<p>Environmental Integration</p> <ul style="list-style-type: none"> • NEPA Planning and Program Support • Cultural and Historic Resource Program • Environmental Compliance Support • Environmental Regulatory Management • Environmental Mitigation Strategy and Planning • Environmental Permits and Compliance • Natural Phenomena Monitoring • Radiological Site Services 	<p>Safety & QA</p> <ul style="list-style-type: none"> • Organizational/Safety Culture • Radiation Protection • Worker Safety and Health Management • Workplace Substance Abuse Programs • Event Notification, Reporting and Investigation • Activity Level Work Planning and Control Program • Quality Assurance • Conduct of Operations • Beryllium 	<p>General Performance Requirements</p> <ul style="list-style-type: none"> • Engineering • Business Administration • Internal Audit • Employee Concerns Program • Strategic Partnership Projects • Program and Project Performance Management • Hanford Portfolio Analysis, Project Support and Independent Assessment 	

Note: Additional CLINs for Option Periods 1 and 2 can be found in Section B, Table B-1, Contract CLIN Structure.

Figure C-1. Work Breakdown Structure by Contract Line Item Number

CLIN 0001 – Contract Transition

C.1 Contract Transition

The desired outcome is a smooth transition of full responsibility for execution of the Contract that avoids disruptions that could impact accomplishment of the DOE mission.

The main goal of the transition process is to ensure that terms and conditions of the Contract are fully understood by the Contractor prior to assumption of full responsibility for execution of the Contract.

The objectives of transition are to complete a safe, effective, and efficient transfer of responsibility for execution of the Contract with no disruption to ongoing operations.

Key Customer

- DOE

Scope and Requirements

The Contractor shall perform the following activities for transition at initial Contract startup:

- Within 72 hours following a Notice to Proceed (NTP), the Contractor shall release on its own website a brief Executive Summary of its offer including the following elements:
 - Name of Contractor including the identification of teaming partners and major subcontractors and a description of the experience that each party brings to the project.
 - Summary/Description of Contractor’s Technical Approach.
 - Organizational Structure and Identification of Key Personnel.
 - Commitments to the Community for the Period of Performance.
 - Total Contract Value Commitment to Small Business Subcontracting.
 - Contractor Performance Commitments.
 - Brief overview of Contractor’s Work on Similar Projects.
- Transition the workforce needed to execute the mission of this Contract. This shall include:
 - Transition of the incumbent workforce in accordance with the requirements of the Contractor Human Resources Management clauses of Section H. The workforce Transition Plan identified in Section H entitled, *Workforce Transition and Benefits Transition: Plans and Timeframes*, shall include the following:
 - Expected workforce composition;
 - Contractor’s plan for engaging with labor representatives;
 - A schedule for preparation and submission of bargaining parameters;
 - Contractor’s plan for complying with section 4(c) of the Service Contract Labor Standards statute, as well as National Labor Relations Act requirements with respect to determination of wages and benefits;
 - Contractor’s plan to engage external counsel to resolve legal issues regarding Human Resources Management Requirements (e.g., pension, labor); and

- Contractor's plan for communicating and engaging with DOE on matters related to the above.
- Employment of additional staff determined to be necessary.
- Placement of subcontracts determined to be necessary, including assumption of existing subcontracts identified by the Contractor or as directed by the DOE Contracting Officer (CO).
- Establish the programmatic and management system elements needed to support execution of the PWS under the terms and conditions of the Contract, including:
 - Review of existing project, program, and management system documents;
 - Assumption of existing project, program, and management system documents, as appropriate;
 - Generation of needed replacement project, program, and management system documents determined by the Contractor to be necessary prior to assumption of responsibility for execution of the Contract; and
 - Establish operations under existing or new programmatic and management systems.
- Support DOE activities needed to determine Contractor readiness to assume responsibility for execution of this Contract under the terms and conditions of the Contract.

Transition

Unless otherwise specified, the transition period for initial Contract startup will be 120² days from written NTP to the Contractor assuming full authority and responsibility for execution of the Contract.

During the transition period, the Contractor shall:

- Participate in a post-award orientation session convened by the CO to discuss important Contract terms and conditions and the overall approach in Contract administration.
- Deliverables listed in Table J-10.1 (Section J Attachment entitled, *Contract Deliverables*) shall be performed under CLIN 0001 (Contract Transition), regardless of where the deliverable appears in the Contract.
- In coordination with DOE, establish and conduct informational and transition progress reporting sessions with stakeholders and regulators. Communicate community commitments through website and appropriate informational sessions and communication venues.
- In coordination with DOE and the incumbent contractor, establish the mechanisms to communicate introductory information and transition progress reports to the current workforce.
- Develop training for the workforce on the PWS and the Contractor proposed technical and management approach for execution. Provide DOE a schedule for completion of training that results in 100 percent of the workforce trained within six months of NTP.
- Coordinate and cooperate with other contractors during transition.
- Adopt existing interface agreements and processes related to Section J Attachment entitled, *Hanford Site Services and Interface Requirements Matrix*. Changes to those agreements shall be executed in

² Unless otherwise specified, the number of days listed in the PWS shall be calendar days.

accordance with Section C entitled, *Interface Management*, and Section H entitled, *Hanford Site Services and Interface Requirements Matrix*.

- Document in a Transfer Agreement, with the prior contractor, the key elements of the transfer, including, but not limited to items such as, purchase order and subcontract assignments, software license agreements, property transfers/exclusions, key documents/databases/records, permits, outstanding liabilities, litigation, administrative claims.
- Perform a due diligence review to:
 - Evaluate material differences and pre-existing conditions provided by DOE at the start of transition.
 - Evaluate the listing and assessment of property and equipment condition provided by DOE at the start of transition. Conduct a joint reconciliation of this list with the incumbent contractor.
 - Review policies, procedures, plans, records, technical documents, permits, safety analyses, and other documents or forms of information to ensure they are complete, accurate, and current. Identify where this Contract does not reflect the most current status of these documents or forms of information.
 - Identify additional material differences and pre-existing conditions associated with Government-furnished property and equipment to be assigned to the Contractor and current conditions of the elements in the PWS established in the Request for Proposal (RFP).
- Prior to the end of transition, provide the CO with a listing of material differences and pre-existing conditions. After receipt and evaluation of the Contractor material difference submission, DOE will negotiate the final list of material differences and pre-existing conditions with the Contractor that may represent a change to the Contract. The CO will provide direction to address these potential changes and will establish time frames for completion of applicable actions.
- In addition to other service protocols, develop a Nuclear Safety protocol as described in the Section H clause entitled, *Hanford Site Services and Interface Requirements Matrix*, for DOE approval prior to completion of transition. The protocol shall be signed, showing concurrence by the Contractor and by other affected contractor(s).
- Support an initial safeguards and security (SAS) survey conducted by DOE.
- Adopt the existing, integrated Nuclear Materials Control and Accountability (MC&A) Plan for use by OHCs performing MC&A activities.
- Develop the inter-contractor ordering and financial agreements necessary to support providing services identified in Section J Attachment entitled, *Hanford Site Services and Interface Requirements Matrix*, to other contractors including clear identification of responsibility for the costs incurred under these agreements.
- Support DOE in-process verification of Contract transition.
- Provide DOE with weekly written transition status reports.
- Establish routine status meetings with DOE and affected contractors to review transition activity progress and issues and progress toward issue resolution.

- Submit a Declaration of Readiness to Execute Contract to DOE, at least two (2) weeks prior to the end of transition, indicating readiness to assume responsibility for execution of the PWS under the terms and conditions of the Contract.
- Support DOE in conducting activities required for DOE to determine that, prior to the end of transition, the Contractor is ready to assume full responsibility for execution of the Contract.
- Develop and submit a Graded Approach for Implementation of Contract Requirements Plan for DOE approval within 90 days of NTP and at the beginning of each option period to implement requirements and streamline processes, eliminate non-value added requirements, apply a graded approach, and identify efficiencies and performance improvements (e.g., to DOE directives, regulations, and others) that are critical to accomplishing the Hanford Site mission. The plan shall include a review and recommendations of changes to the current Hanford Site Standards and implementing procedures for the elimination of requirements and/or streamline processes. The Contractor shall use the Hanford Site interface governance process to reach agreement with the Other Hanford Contractors on proposed changes.

Transition Plan

The Contractor shall submit a Transition Plan within 15 days of receipt of written NTP that fulfills the transition requirements. The objectives of the Plan are to minimize the impacts affecting continuity of operations, identify key issues and approach to resolution, and overcome barriers to transition. Successful completion of the transition activities will enable the Contractor to assume full responsibility for execution of this Contract no later than 120 days after NTP.

The Plan shall:

- Describe the approach to transition of services and other work identified in the Contract, including the transition team, their roles and responsibilities; description of the work breakdown structure for each element of Contract transition of responsibilities including: scope of work, labor relations, human and material resources, process, rationale, planned activities, and milestones necessary for conducting safe, orderly contract transition; minimize impacts on continuity of operations; identify key issues and associated resolutions that may arise during transition; and plan interactions with DOE, other contractors, the workforce, regulators and stakeholders.
- Identify agreements, letter approvals, determinations of cost allowability, or understandings the Contractor plans to rely upon and apply to work performed under this Contract, or in the accounting for costs incurred. DOE agreements with predecessor contractors, contract guidance, direction, or interpretation on other contracts shall not apply to this Contract unless they have been identified and approved in advance by the CO. CO approved agreements shall be incorporated into Section J Attachment entitled, *Advance Understanding on Costs*.
- Include a description of the activities necessary for the Contractor to assume full responsibility for this Contract no later than 120 days after NTP. Additionally, identify post transition activities that may be required (e.g., notifications to outside agencies of transfer of co-operator responsibilities, or completion of procedure updates).
- Address other activities and deliverables specified in this Contract that require DOE approval prior to completion of transition.

CLINs 0002, 1002, 2002 – Hanford Site Benefit Plans

C.2 Responsibilities for Sponsorship, Management and Administration of Contractor Employee Pension and Other Benefit Plans

The Contractor shall have certain responsibilities regarding sponsorship, management, and administration of pension and other benefit plans for certain active and retired contractor employees at the Hanford Site. The requirements associated with these responsibilities are set forth in the Section H clauses entitled, *Employee Compensation: Pay and Benefits*, and *Post-Contract Responsibilities for Pension and Other Benefit Plans*. Non-labor related costs to perform these functions reside within these CLINs. Labor related costs to perform the management and administration functions are to be charged to the Business Administration scope, under the Infrastructure and Site Services CLINs.

CLINs 0003, 1003, 2003 – Legacy Benefit Plans and Legacy Workers' Compensation

C.3 Responsibilities for Legacy Post-Retirement Benefit Plans and Legacy Workers' Compensation

The Contractor will have certain responsibilities for post-retirement benefit plans and workers' compensation for certain retired contractor employees and former workers associated with work at different DOE Sites. The requirements associated with these responsibilities are set forth in the Section H clauses entitled, *Employee Compensation: Pay and Benefits*, *Post-Contract Responsibilities for Pension and Other Benefit Plans*, and *Workers' Compensation*. Non-labor related cost to perform these functions reside within these CLINs. Labor related costs to perform the management and administration functions are to be charged to the Business Administration scope, under the Infrastructure and Site Services CLINs.

CLINs 0004, 1004, 2004 – Infrastructure and Site Services

General Requirements

Scope Summary

The PWS is intended to provide a broad framework and general scope, including interfaces and requirements, of the work to be performed. Additional detailed requirements are included in the Section J Attachment entitled, *Hanford Site Services and Interface Requirements Matrix*, which identifies services to be provided to OHCs.

Streamlining processes, eliminating non-value added requirements, applying a graded approach, and identifying efficiencies and performance improvements are critical to accomplishing the Hanford Site mission. The Contractor throughout the Period of Performance (POP) of this Contract shall seek to reduce non-value added requirements and processes that impede progress, and identify efficiencies and performance improvements that reduce the actual cost and/or improve the schedule for the work.

Hanford Site Integration Contractor

The Contractor shall perform the function of Hanford Site Integration. As the Site's Integration Contractor, the Contractor shall, in collaboration with OHCs, develop a Hanford Site Integration governance policy, and provide to DOE for approval. The governance policy shall define roles and responsibilities relative to inter-contractor leadership and cooperation in the conduct and advancement of the Site's environmental cleanup missions. The Contractor shall provide DOE with an unfiltered forward-looking forecast of emerging issues that could affect OHCs, and shall identify longstanding or emerging issues that affect efficient Site operations and provide recommendations for improvement.

Additionally, the Contractor shall facilitate a contractor leadership council, facilitate crosscutting inter-contract Site integration opportunities (e.g., business systems, training), and lead/facilitate DOE-directed integration initiatives. In planning and executing activities for the Hanford Site, the Contractor shall coordinate with the MAPR and/or MAPR contractor to ensure alignment with DOE's MAPR mission.

Infrastructure and Services Alignment Plan

The Contractor shall develop, maintain, and update an Infrastructure and Services Alignment Plan (ISAP) that incorporates the strategic vision and describes the activities necessary to integrate the Contractor responsibilities with those of OHCs, to right-size the infrastructure and services, and to maintain the capacity of infrastructure systems provided for the Hanford Site over its life cycle. Other assessments, plans, studies, and analyses, as detailed in Section C, PWS, may be part of the ISAP.

The ISAP shall also provide planning information to successfully achieve the Contractor outcomes while minimizing the Hanford Site's life cycle costs. The ISAP shall collect information from Master Plans, the Forecast of Services process, and other documents and processes to support infrastructure and services forecasting. The ISAP shall identify opportunities to re-engineer or replace systems as necessary, without negatively impacting mission contract project schedules, in a timely and coordinated fashion. The ISAP shall include an approach for taking advantage of new technologies and business practices that make good business sense from a safety, compliance, cost-effectiveness, and energy-efficiency perspective. The ISAP shall consist of a publicly releasable summary brochure of less than 50 pages and an internal Hanford Local Area Network (HLAN) website with access to more comprehensive planning and supporting information.

The ISAP shall incorporate a forecast of needed utilities, services, and infrastructure from OHCs. The Contractor shall develop performance metrics/service levels in each of the CLINs, except for CLIN 0001 (Contract Transition). The performance metrics/service levels will be used to evaluate performance of services delivered under this Contract and the physical condition of infrastructure and utilities, including systems and equipment necessary for the life cycle of Hanford cleanup for DOE approval. The Contractor shall also establish the frequency of performance measurement against the metrics. Planned and actual performance shall be evaluated and reported in the monthly report. The performance information shall be used in the development of the ISAP, including annual updates and in determining the need for infrastructure reliability projects.

Government-Furnished Services and Information

The Government-Furnished Services and Information (GFS/I) included in this Contract (see Section J Attachment entitled, *Government-Furnished Services and Information*) is for the first year of this Contract term. DOE is committed to providing effective support to the Contractor throughout the period of Contract performance, and the Contractor may request that DOE consider providing additional GFS/I. To manage the GFS/I furnished under this Contract and to evaluate the additional GFS/I that may be required by the Contractor, the Contractor shall submit for DOE approval:

- GFS/I Request: 12 month advance projection of GFS/I to be furnished under this Contract and additional Contractor requested GFS/I, prior to each fiscal year; and
- GFS/I Request – Update: Quarterly update to the projection of GFS/I furnished under this Contract and additional Contractor requested GFS/I, prior to each quarter.

For the additional Contractor requested GFS/I, if for any reason DOE cannot provide the Contractor with its requested additional GFS/I, the Contractor remains fully and solely responsible for obtaining the needed services and/or information in a timely manner and without recourse against DOE.

For items described in Section J Attachment entitled, *Hanford Waste Site Responsibility Assignment Matrix*, DOE will execute its GFS/I responsibilities for review, approval, and/or certification actions following Contractor submission of an acceptable product.

For each GFS/I that includes an interface with OHCs, the Contractor shall coordinate with each of the OHCs to support a cooperative and effective delivery of GFS/I.

C.4 Infrastructure and Site Services

The scope of Infrastructure and Site Services includes activities such as utilities (electrical and energy management, water, and sewer), sanitary waste disposal, roads and grounds, and railroad services. The Contractor shall develop and implement an integrated life cycle approach to furnish, operate, maintain, and close infrastructure supporting the Hanford Site mission, based on necessary and sufficient user requirements.

The Contractor shall maintain services and equipment required to support the Hanford Site environmental cleanup mission and ensure safe, compliant, cost-effective, and energy-efficient alignment with projects that are integral to the Hanford Site mission. The Contractor shall, when appropriate and cost-effective, replace fixed and system related utilities with temporary or permanent services from off-grid power sources. When DOE or the Contractor determines services and/or equipment are no longer required or cost-effective, the Contractor shall propose actions for elimination or removal. The Contractor shall right-size the infrastructure and services and maintain the capability of infrastructure systems provided for the Hanford Site over its life cycle. If elimination of specific services is necessary, DOE approval is required.

C.4.1 Utilities and Infrastructure

C.4.1.1 Electrical Transmission and Distribution, and Energy Management

The desired outcome is timely, compliant, safe, reliable, cost-effective, and energy-efficient electrical service to Hanford Site projects/facilities that meets customer needs and maintains the integrity of the nation's bulk power system.

Key Customers

- DOE
- OHCs
- Waste Treatment and Immobilization Plant (WTP)
- Businesses, or other public utilities that operate facilities in the 100 Area, 200 Area, 400 Area, and 600 Area

Scope and Requirements

- The Contractor shall:
- Operate the Hanford Site high voltage electrical transmission and distribution systems (230kV and 13.8kV), including energy management responsibilities, and coordinate with the interconnected utility operators, as necessary.

- Operate, maintain, upgrade, renovate, and replace electrical utility systems in alignment with the Electrical Utilities Master Plan, approved by DOE.
- Operate the Hanford electrical transmission and distribution system in a safe and reliable manner, in compliance with the requirements of the mandatory Electric Reliability Standards.
- Integrate electrical utilities improvements with Site projects, consistent with and in addition to the Comprehensive Land-Use Plan (CLUP), CLUP area management and resource plans, and DOE Real Property Asset Management.
- Monitor components for signs of impending failure, with selective maintenance performed when appropriate, to extend the operating life.
- Plan, organize, direct, monitor, and evaluate the operation of the Hanford Site electrical transmission and distribution system.
- Maintain safe working areas through controlled system configuration changes.
- Analyze electrical system loading and correct abnormal/emergency conditions to maintain reliable operations.
- Prepare and execute switching orders.
- Provide engineering support, including configuration control; system modification design; supervisory control and data acquisition (SCADA) and remote terminal unit operational support; equipment breakdown and repair analysis; excavation permit review; construction project design review; engineering service request evaluation and response; and system reconfiguration.
- Provide condition assessment survey results for electrical utilities, facilities, systems and equipment within the timeframe.
- Coordinate with OHCs to obtain the following:
 - Energy cost and consumption data for the Site Sustainability Plan;
 - Energy cost and consumption data for the quarterly Hanford Site energy cost and consumption data entry to Energy Management System 4 database;
 - Facility shutdown constraints and impacts due to fuel reductions for the Site Sustainability Plan; and
 - Facility electrical load information for the annual electrical load forecast.

C.4.1.1.1 Electrical Operations

The Contractor shall:

- Provide meter specification and design reviews; collect electrical metering data, prepare recharge billings, and distribute electrical load charts for buildings and building groups; evaluate energy savings opportunities; and interface on Contract and billing corrections.
- Review and validate Bonneville Power Administration (BPA) power and transmission sales agreements, rate schedules and tariffs; verify the monthly BPA power and transmission service invoices for accuracy (DOE pays the invoices received from BPA); develop a breakdown of each Contractor costs, and provide the cost breakdown to DOE monthly.

- Ensure the accuracy of the Contractor's electricity purchases from the Benton Public Utility District No. 2 (BPUD), the Benton Rural Electric Association (BREA), and the City of Richland.
- Prepare an annual load forecast of power and energy requirements for the Hanford Site electrical loads, in accordance with the format prescribed by BPA, and submit the forecast to DOE.
- Ensure planned outages affecting the Hanford Site 230kV transmission system are coordinated in advance with the BPA, in accordance with the agreed-upon notification process.
- Prepare Outage and Load Shift Reports utilizing the format provided by the BPA, and submit electronic copies of the reports to BPA and DOE within four (4) days of the outage or load shift.
- Operate and maintain the A-6 substation, including 13.8kV cables from Building 251E to Building 87, for serving power to WTP. WTP will connect to the load side of the 13.8kV switchgear in Building 87. Operate and maintain the cables for WTP in accordance with applicable interface control documents.
- Operate and maintain roadway luminaires and light standards along Route 4 South adjacent to the 300 Area. The Contractor is responsible for operations and maintenance (O&M) of roadway luminaires, and light standards along Route 4 South adjacent to the 300 Area from the secondary side of Cypress/Route 4S Intersection. The Contractor is also responsible for the street lighting within the 300 Area, and area lighting in the 300 Area parking lots, unless the fixture is attached to a pole owned by the City of Richland.
- Supply a work scope statement and a charge code to DOE for BPA work when it is necessary to obtain support from BPA for substation activities, such as relay settings, equipment installation, and equipment testing. DOE will issue a task order to BPA utilizing Interagency Agreements.
- Routinely communicate with BPA, BPUD, and BREA regarding system interface and provide information (e.g., transformer losses, relay settings, unplanned outage response, billing), when requested.

C.4.1.1.2 Electrical Distribution System Maintenance

Maintenance of the distribution system consists of a combination of preventive, predictive, and repair maintenance programs that are developed to allow a piece of equipment to function within design operating conditions and to realize its maximum, reasonable, and useful life. Electrical distribution systems shall be maintained to comply with safety requirements and assumptions for Hanford Site facilities as documented in applicable documented nuclear safety analyses (e.g., documented safety analyses and technical safety requirements). The Contractor shall use Quality Assurance (QA), improvement plans, operational trends, vendor recommendations, cost/benefit analysis, and engineering evaluations as a basis to establish maintenance activities.

The Contractor shall drain, store, dispose of, and recycle (as appropriate) polychlorinated biphenyl oil from electrical equipment.

C.4.1.1.3 Energy Management

The Contractor shall develop an Annual Site Sustainability Plan that supports the Hanford Site energy savings goals and/or performance expectations consistent with the applicable federal energy, buildings, and fleet management requirements. The Plan shall:

- Contain an energy conservation component to mitigate the effects of a sudden disruption in the supply of fuel oil, natural gas, electricity, and other critical energy supplies.

- Be reviewed and updated on an annual basis.
- Be prepared in accordance with the annual guidance from DOE Headquarters (DOE-HQ) and submitted to DOE.
- Contain textual information describing the Contractor's activities or projects that support the Hanford Site energy savings goals and/or performance expectations, and numerical data (e.g., annual energy costs, energy consumption, square footage, and water usage) for OHCs.
- Perform energy conservation performance measurement tracking and reporting, and incorporate into the Plan.
- Support DOE in the development and implementation of the Hanford Site Electrical Metering Plan, which includes but is not limited to, providing data and input for the report, drafting the report, coordinating with OHCs, providing to DOE, resolving comments and producing a final product. The Plan shall be updated annually.
- Retain historical facility electrical demand and energy consumption records.

C.4.1.1.4 Electrical Planning

The Contractor shall develop and update an Electrical Utilities Master Plan that documents a strategy for managing repairs, life extensions, replacements, and deactivations for the electrical utility system within the scope of this Contract over the life cycle mission planning horizon and plan to execute the work scope within the 10 year period covered by this Contract. The Plan shall:

- Include electrical utilities operations performance analysis and predict remedial and preventive maintenance and upgrade projects to support reliable system operation for the projected life of the service need.
- Contain a detailed inventory of facilities, structures, vehicles, and equipment supporting the electrical utilities service and shall document the condition of these items in the Plan.
- Explain the process for determining condition. Visual inspection of the facilities, structures, vehicles, and equipment is required. If appropriate, non-destructive examination and destructive testing shall be used. Where a 100 percent visual inspection may not be feasible, a statistical sampling method shall be used and explained in the Plan.
- Develop and document regulatory strategies to address electrical system physical condition, modifications, or upgrades such as, but not limited to, electric reliability standards, along with the list of the applicable regulations and industry standards. Long lead regulatory activities such as, but not limited to, permitting and regulatory approval shall be addressed regarding system modifications, new installations, and upgrades.
- Contain activity based logic schedules that shall be developed to document the progression of an activity to completion.
- Include National Environmental Policy Act (NEPA) and proposed infrastructure projects for the electrical utilities service. Define and formulate maintenance and upgrade projects ready for project execution.
- Align the electrical system with the functional requirements of the cleanup mission by displaying specific alignment with individual cleanup projects.

- Focus on cleanup mission.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints:

- The Hanford Site receives electricity from the BPA, BPUD, BREA, and the City of Richland. Electricity and transmission service from BPA are obtained through a Power Sales Agreement and Transmission Service Agreement between BPA and DOE. Electricity from BPUD, BREA, and the City of Richland is obtained by standard industrial customer, purchased by OHCs. Because the Hanford Site transmission and distribution system is physically connected to the BPA, BPUD, and BREA systems, the Contractor shall communicate, verbally or through email, on a regular basis with the appropriate BPA substation operators, BPUD, and BREA to ensure day-to-day operation and coordination of the electrical systems interfaces. DOE is responsible for formal communications with these entities.
- The 300 Area electrical distribution system is owned, operated, and maintained by the City of Richland.
- For the MAPR, the Contractor provides no-cost electrical power to the parcels of land at MAPR, roughly equivalent to the power levels at the time the MAPR is assigned. This does not include system reconfiguration, maintenance, or repair.

Interfaces: BPA, BPUD, BREA, City of Richland, other businesses, and other public utilities that operate facilities.

C.4.1.2 Water System

C.4.1.2.1 Water System Operations and Maintenance

The desired outcome is a safe, compliant, and reliable Hanford Site Water System (i.e., raw and potable water) that meets customer needs.

Key Customers

- OHCs
- WTP

Scope and Requirements

The Contractor shall:

- Align the systems and equipment with Hanford Site missions (such as capacity and reliability), and eliminate and remove services and equipment that are no longer required.
- Operate, maintain, upgrade, renovate, and replace water systems in alignment with the Hanford Site Water System Master Plan.
- Manage, operate, and maintain the water systems in accordance with, but not limited to, applicable federal, state, and local laws, regulations, and guidance documents for water systems. For the purposes of the water systems responsibilities contained within the scope of this Contract (100-BC Area, 200 Area, and the 100 Area Export Water Systems), the term “purveyor” (as written in the *Washington Administrative Code* [WAC] and other state regulations) is the entity responsible for (O&M) and is referring to the Contractor.

- Monitor components for signs of impending failure, with selective maintenance performed when appropriate, to extend the operating life.
- Manage the water system in accordance with reliability agreements negotiated with the OHCs being served.
- Certify and submit required performance and monitoring reports to the Washington State Department of Health (DOH). The Contractor manager responsible for water utilities is authorized to sign and/or certify performance and monitoring reports. DOE shall be copied on submittals.
- Certify and submit permits for the water system to DOH. The Contractor is given signature authority for DOH water system permits. The Contractor shall pay fees associated with the DOH permits, reviews, and approvals, which are allowable, reimbursable costs under the terms of this Contract. DOE shall be copied on submittals.
- Provide DOE with documents that require approval from the DOH, such as requests for system modifications, variances, exemptions, and waivers of state regulations for water systems. DOE will review and submit these documents to DOH, as appropriate.
- Perform activities necessary for safe and compliant production of drinking water, including the performance of assessments and inspections necessary to ensure continued regulatory compliance.
- Control connections to the water systems in compliance with state requirements, and approve, in writing, connections to the water systems.
- Control other non-potable piping that crosses or comes within proximity to a potable water distribution system, in accordance with the Washington State Water System Design Manual.
- Establish and implement a cross-connection control program in accordance with, but not limited to, applicable state laws, regulations, and guidance documents. This Contract establishes the legal authority for the Contractor to implement a cross-connection control program.
- Assess changes to regulations to be promulgated by the state, and provide the impact assessment to DOE. Identify required physical modifications to the water system that may be necessary to comply with impending regulations, and provide a schedule and cost estimate for implementation of physical modifications.
- Provide surveillance and maintenance (S&M) of structures, systems, and components (SSC) and processes to ensure operation within the approved safety and compliance requirements envelope, including preventive maintenance, calibrations, repair of failed and malfunctioning equipment, walkdown of safety systems, equipment and facility grounds (operational surveillance), and routine radiological surveys.

C.4.1.2.2 Water System Planning

The Contractor shall maintain the existing Water System Master Plan. The Plan shall:

- Document a strategy for managing repairs, life extensions, replacements, and deactivations for the water system within the scope of this Contract over the life cycle mission planning horizon and plan to execute the work scope within the 10 year period covered by this Contract.
- Align the water system with the functional requirements of the cleanup mission by displaying specific alignment with individual cleanup projects.

- Focus on cleanup mission.
- Contain a detailed inventory of facilities, structures, and equipment, such as reservoirs, basins, clear wells, filters, disinfection systems, water distribution piping, pumps, motors, generators, and tanks supporting the water system and document the condition of these items in the Plan.
- Explain the process for determining the condition of the water system. Visual inspection of the facilities, structures, and equipment is required. If appropriate, non-destructive examination and destructive testing shall be used. Where a 100 percent visual inspection may not be feasible, such as underground water distribution piping, a statistical sampling method shall be used and explained in the Plan.
- Include water utilities operations performance analysis and predict remedial and preventive maintenance and upgrade projects to support reliable system operation for the projected life of the service need.
- Develop and document regulatory strategies to address water system physical condition, modifications, or upgrades to comply with Washington State drinking water regulations along with the list of the applicable regulations and industry standards. Long lead regulatory activities, such as but not limited to, permitting and regulatory approval shall be addressed regarding system modifications, new installations, and upgrades. Activity based logic schedules shall be created to show the progression of activities to completion.
- The Water System Master Plan shall include NEPA, National Historic Preservation Act (NHPA), and proposed infrastructure projects for the electrical utilities service. Coordinate with affected parties and regulators (e.g., OHCs, DOH) in order to plan and schedule water plant outages, repairs, and modifications.

The Contractor shall perform, as requested, the following service for OHCs:

- Manage water system contaminant monitoring including creating monitoring plans for OHCs, sample collection, and analysis in accordance with state regulations for water systems.

For the Annual and Multi-Year Baseline, in regards to Water Systems, the Contractor shall provide, at a minimum, a description of the work activities, including upgrades/renovations, along with the cost of labor (full-time employee), subcontracts, assessments, materials, and assumptions necessary to operate and maintain water systems.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints:

- The City of Richland supplies water to the Hanford Site 300 Area, located north of the city.
- The Contractor shall be responsible for the water distribution system up to and including the first off-valve or demarcation point outside the customer's facility or complex of facilities. The customer or facility maintains responsibility for lines downstream of this agreed-upon point. On side-by-side multiple valve isolations and backflow assemblies, the facility assumes responsibility from the discharge side of the downstream isolation valve. For WTP, the demarcation point is the premise isolation backflow prevention at the fence line. For the Plutonium Finishing Plant, the demarcation point is the premise isolation backflow assembly.
- Interface agreements shall be created with customer(s), if needed, to define exact demarcation points.

Interfaces: DOH and State of Washington Department of Ecology (Ecology). There may be others as required.

C.4.1.3 Sewer Systems

C.4.1.3.1 Sewer System Operations and Maintenance

The desired outcome is a safe, compliant, and reliable Hanford Site sanitary sewer system that meets customer needs.

Key Customers

- OHCs
- Energy Savings Performance Contractor

Scope and Requirements

The Contractor shall:

- Manage, operate, and maintain the Hanford Site sanitary sewer systems.
- Monitor components for signs of impending failure, with selective maintenance performed when appropriate, to extend the operating life.
- Perform activities to ensure safe operations and compliance with applicable laws and regulations, such as flow data tracking, drain field rotations, filter inspection/cleaning, drain field monitor port inspections, tank pumping, electrical component inspection, and alarm response.
- Conduct flow data calculations and assessments, and submit required reports to DOH.
- Sign and submit required monitoring, inspection, and maintenance reports for the sewer systems to DOH. The Contractor, through this Contract, is given authority to sign and/or certify these reports. DOE shall be copied on submittals.
- Submit requests for approval of documents for DOH to DOE beforehand, and pay fees associated with the DOH review and approvals. A draft letter to DOH shall be submitted along with the request from the Contractor.
- Submit to DOE requests for variances, exemptions, and waivers of state regulations for sewer systems. A draft letter to DOH shall be submitted along with the request from the Contractor.
- Transport sewage as needed to the 200 West Evaporative Lagoon.
- Operate and maintain the 200 West Evaporative Lagoon in accordance with the Sewer System Master Plan, Ecology-approved General Sewer Plan, and Ecology Permit ST-0045514 and other associated permits. The 200 West Evaporative Lagoon consists of two aeration lagoons, two settling lagoons, two evaporative lagoons, a lagoon pump station, and a piped collection system and associated sewer equipment and facilities.
- Sign and submit monitoring, inspection, and maintenance reports related to the 200 West Evaporative Lagoon to Ecology.

C.4.1.3.2 Sewer System Planning

The Contractor shall update the existing Sewer System Master Plan. The Plan shall:

- Document a strategy for managing repairs, life extensions, replacements, and deactivations for the sewer systems within the scope of this Contract over the life cycle mission planning horizon and plan to execute the work scope within the 10 year period covered by this Contract.
- Align the sewer systems with the functional requirements of the cleanup mission by displaying specific alignment with individual cleanup projects.
- Focus on cleanup mission.
- Contain a detailed inventory of facilities, structures, and equipment such as septic tanks, sewage lagoons, subsurface soil absorption systems, holding tanks, pumps, and pumper trucks supporting the sewer systems and shall document the condition of these items in the Plan.
- Detail the process for determining condition. Visual inspection of the facilities, structures, and equipment is required. If appropriate, non-destructive examination and destructive testing shall be used. Where a 100 percent visual inspection may not be feasible, such as in underground systems, a statistical sampling method shall be used and explained in the Plan.
- Include sewer system operations performance analysis and predict remedial and preventive maintenance and upgrade projects to support reliable system operation for the projected life of the service need.
- Include NEPA, NHPA, and proposed infrastructure projects for the sewer utilities service. Develop and document regulatory strategies to address sewer system physical condition, modifications, or upgrades to comply with State of Washington sewage regulations, along with the list of the applicable regulations and industry standards. Long lead regulatory activities, such as but not limited to, permitting and regulatory approval shall be addressed regarding system modifications, new installations, and upgrades. Activity based logic schedules shall be created and documented to show the progression of an activity to completion.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints:

- The septage from routine pumping of the 200 and 600 Area septic tanks and sanitary sewer holding tanks is currently discharged into the 200 West Evaporative Lagoon.
- The WTP sewer system is excluded from the scope of this Contract.

Interfaces: Activities including permitting and inspections for state regulators.

C.4.1.4 Sanitary Waste Management and Disposal

The desired outcome of the Sanitary Waste Management and Disposal function is safe, compliant inspection, and disposal of non-radioactive, non-hazardous dry waste on the Hanford Site, to meet customer needs.

Key Customer

- OHCs

Scope and Requirements

The Contractor shall:

- Pick up, inspect, and dispose of non-radioactive, non-hazardous dry waste.
- Monitor and inspect the Hanford solid waste landfill, and monitor, inspect, and operate other Hanford Site inert and demolition landfills.
- Collect refuse from dumpsters on the Hanford Site, and transport to offsite landfill.
- Provide onsite verification surveys to ensure that radioactive or other nonconforming wastes are not sent offsite.
- Provide maintenance and monitoring of lysimeters, leachate collection and disposal, and methane gas monitoring for the Hanford Solid Waste Landfill.
- Provide fence repair, annual benchmark integrity, soil stabilization; weekly inert and demolition landfill inspection, and quarterly inspection of Hanford Solid Waste Landfill.
- Provide oversight of offsite contracts for solid municipal waste, non-regulated drummed waste, asbestos waste, and medical waste.
- Dispose of sanitary waste offsite.
- Dispose of construction debris that meet WAC in former onsite borrow pits.
- Provide support to OHCs regarding laundry services:
 - Provide transportation oversight of contaminated radioactive protective clothing (i.e., pickup and delivery between the Hanford Site and the offsite laundry service contractor's cleaning facilities).
 - Conduct Radiological Control Technician monitoring, coordination of transportation activities, and instrumentation (calibration) as necessary to certify that non-radiological shipments are free of contamination.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints:

- The Hanford Solid Waste Landfill is closed and will not be utilized during the performance of this Contract.
- Unitech Services Group provides commercial laundry and decontamination services for government-owned protective clothing, non-regulated items, and regulated face pieces. This service includes periodic batch pickup and drop off at Site locations.

Interfaces: None.

C.4.1.5 Roads and Grounds

The desired outcome is a reliable and safe road and ground system that meets the needs of Hanford Site customers in a quality, safe, timely, and cost-effective manner.

Key Customers

- DOE
- OHCs
- WTP

Scope and Requirements

The Contractor shall:

- Maintain, update, and deliver to DOE for approval the existing Roads Master Plan. The Plan shall:
 - Document a strategy for managing repairs, life extensions, upgrades, renovations, replacements, and restrictions for road system within the scope of this Contract over the life cycle mission planning horizon and plan to execute the work scope within the 10 year period covered by this Contract.
 - Contain a detailed inventory of roads and document the conditions of the roads.
 - Use non-destructive examination and destructive testing, if appropriate. Where a 100 percent visual inspection may not be feasible, such as for road subsurface, a statistical sampling method shall be used and explained in the Plan.
 - Explain the process utilized for determining the condition of the roads. Roads shall be inspected in accordance with the Plan.
 - Include road system operations performance analysis, predict remedial and preventive maintenance, and upgrade projects to support a reliable road system of the projected life of the service need.
 - Develop and document regulatory strategies to address road system physical condition, modifications, or upgrades along with the list of the applicable regulations and industry standards. Activity based logic schedules shall be created to show the progression of an activity to completion.
 - Focus on cleanup mission.
- Maintain necessary and sufficient Site roadways, to include patching/paving, sand and snow removal, striping, and other services. The roadway consists of the road base, pavement, shoulders, required lighting, and signage.
- Maintain the common grounds³.
- Align the road system with the functional requirements of the cleanup mission by displaying specific alignment with individual cleanup projects.
- Operate, maintain, upgrade, renovate, and replace the road system in accordance with applicable state and federal regulations and in alignment with the Plan.
- Conduct assessments to determine both near and long-term maintenance needs.
- Restrict or close roads that are no longer needed.

³ “Common” meaning used by more than one contractor.

- Repair, maintain, replace, or upgrade primary and secondary roads to achieve safe conditions.
- Maintain safe roads and parking lots during normal and inclement weather conditions, including grade and sweep roads and shoulders, remove debris, and clean up accidents and spills.
- Make recommendations, to DOE, regarding restricting access to DOE, obtain DOE concurrence, and make the appropriate notifications of restricted access or closure to OHCs. Execute access restrictions utilizing administrative and physical controls.
- Develop, implement, and maintain a Snow Removal Plan in coordination with OHCs.
- Remove sand and snow from primary and secondary roads and at designated facilities, parking lots, and walkways. Snow removal services include application of de-icing compounds, sanding, and snow and ice removal by utilizing snow plowing and manual labor.
- Provide road striping and crack sealing of Hanford Site access and area roads.
- Provide a point-of-contact for activities that involve local law enforcement organizations and other traffic control groups, such as the City of Richland and U.S. Department of Transportation (DOT).
- Maintain the common grounds to ensure public/worker safety within the 200, 300, and 600 Areas. Activities include perimeter fence maintenance at the Site boundaries and common parking lot, and sidewalk maintenance, which includes sweeping, striping, bumper block repair, hole repair, and general area cleanup.
- Maintain ability to utilize roads during emergency situations.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: Facility specific parking lots and sidewalks associated with OHCs are not included in this work scope as a direct funded service.

Interfaces: City, state, and federal agencies where Hanford roads physically interface with public roadways.

C.4.1.6 Railroad System

The desired outcome is a safe, reliable, and maintained railroad to support shipments on the Hanford Site, as necessary.

Key Customers

- DOE
- OHCs
- Energy Northwest

Scope and Requirements

The Contractor shall:

- Provide inspection and maintenance to support the shipments for Energy Northwest and to provide a safe interface with the road system (e.g., railroad crossing arms, transition points between rail and roadway).

- Maintain the track at a Class II level including, but not limited to, rails, ties, and rail bed, consistent with supporting Energy Northwest shipments, and in accordance with Federal Railroad Administration regulation.
- Provide documentation, such as reports, to DOE as required by the Federal Railroad Administration regulations.
- Provide railroad system inspection and maintenance, as necessary. Inspections are required prior to Energy Northwest shipments.
- Coordinate with OHCs, projects and offsite entities prior to and during onsite rail movements, including placement of flaggers at necessary intersections, taking proper security actions (e.g., traffic control), and making Hanford Site notifications.
- Support DOE, as needed, to make modifications to the DOE owned railroad system in response to requests from non-DOE entities.
- Provide a plan to reduce the footprint of the Hanford railroad system not utilized by Energy Northwest, through planned turnover for long-term surveillance or transition to another entity outside of the DOE Office of Environmental Management (EM).
- Work with OHCs and DOE on a long-term disposition plan for the railroad system, within the constraints of the Hanford cleanup priorities.
- Provide a transition plan for turnover of the proposed railroad system to an entity outside the EM.
- Maintain railroad and road intersections to ensure the safety of vehicles crossing the intersection. Railroad removed north of Energy Northwest does not need to be restored; however, where the track is removed road intersections shall be maintained in a safe configuration. Modifications or impacts to the railroad system servicing Energy Northwest shall be restored. Removal of the railroad is allowed to support the Hanford Site mission and does not require restoration, with the exception of railroad system components required to support Energy Northwest.
- Maintain the railroad system within the boundary of the Energy Northwest leased property.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints:

- Railroad shall be modified or removed to ensure the success of the Hanford cleanup mission. The Contractor is responsible for the railroad North of Horn Rapids Road. The truck and rail crossing at Horn Rapids Road is not in the scope of this Contract.
- Energy Northwest leases the land for their site from DOE. The railroad system includes track that is within the Energy Northwest site, and the Contractor is responsible for maintaining this railroad within the Energy Northwest site.

Interfaces: Energy Northwest, transportation or railroad companies supporting Energy Northwest for coordination of rail operations, and applicable federal and state regulators (e.g., Washington Utilities and Transportation Commission) for the purpose of maintaining compliance.

C.4.2 Transportation

C.4.2.1 Motor Carrier Services

The desired outcome is reliable, safe, and compliant transportation of freight including hazardous materials that meets the needs of Hanford Site customers in accordance with project schedules, including a right-sized transportation service that helps to reduce life cycle cost over the remaining life of the Hanford mission.

Key Customer

- DOE
- OHCs

Scope and Requirements

The Contractor shall:

- Perform as the Hanford Site motor carrier, similar to a commercial motor carrier.
- Operate a centralized pool of Government vehicles and drivers for onsite and limited commercial carrier operation, in accordance with federal motor carrier safety regulations and the Hanford Sitewide Transportation Safety Document.
- Provide heavy equipment transport and operations management and administration support including, but not limited to, operating heavy equipment, implementing the maintenance program, deliveries and scheduling equipment.
- Operate and maintain regulated and non-regulated guzzlers including performing inspections, preventive maintenance, procedure control and compliance; overseeing usage and cost tracking; providing customer coordination and support; and performing customer planning, and scheduling.
- Provide compressed gas shipments.
- Provide refueling of gasoline and diesel powered equipment across the Hanford Site.
- Support office moves.
- Maintain cargo tankers.
- Pick up at local vendors as requested by their customers.
- Provide traffic management to ensure the most efficient, cost-effective, energy-efficient, and safe way to execute the movement of materials, including hazardous materials.
- Serve as the Traffic Manager by coordinating onsite and offsite shipments, including hazardous materials.
- Serve as the designated shipper.
- Manage overnight small package delivery.
- Manage export/import/services with U.S. Customs and freight rate negotiations with carriers.
- Manage inbound and outbound freight including, but not limited to, less-than truckload, truckload, and air.

- Use the DOE Automated Transportation Management System.
- Use the DOE Motor Carrier Evaluation Program for evaluating less-than truckload and truckload carriers that transport highway-route controlled quantities of radioactive material, and truckload quantities of radioactive material and hazardous waste.
- Notify Energy Northwest seven (7) days in advance of movement of explosives over 1,800 pounds, excluding small arms ammunitions or classified shipments, within five (5) miles of Energy Northwest.
- Negotiate tenders with carriers, and submit these tenders to DOE.
- Create a Motor Carrier Master Plan. The Plan shall:
 - Document a strategy for managing repairs, life extensions, replacements, and deactivations for vehicles, trucks, facilities, structures, and heavy equipment within the scope of this Contract over the life cycle mission planning horizon and plan to execute the work scope within the 10 year period covered by this Contract.
 - Align the motor carrier system with the functional requirements of the cleanup mission by displaying specific alignment with individual cleanup projects.
 - Be cleanup mission focused.
 - Contain a detailed inventory of facilities, structures, and equipment supporting the Motor Carrier service and shall document the condition of these items in the Plan.
 - Explain the process for determining condition. Visual inspection of the vehicles, facilities, structures, and equipment is required. If appropriate, non-destructive examination and destructive testing shall be used. Where a 100 percent visual inspection may not be feasible, a statistical sampling method shall be used and explained in the Plan.
 - Include NEPA and proposed motor carrier projects for the Motor Carrier Service. Develop and document regulatory strategies to address motor carrier system physical condition, modifications, or upgrades along with the list of the applicable regulations and industry standards. Activity based logic schedules shall be created and documented to show the progression of an activity to completion.
- Provide specialized vehicles to OHCs, by mutual agreement, to support the efficient management of resources. Vehicles provided by the Contractor shall remain in the fleet maintenance programs.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints:

- Each Hanford Site Contractor shall prepare their freight for shipment (packaging the freight) and provide associated documentation or direct a pickup of freight from a particular Site Contractor or vendor.
- The preferred method for shipment of freight to other DOE Site(s) or to commercial vendor(s) is using a commercial motor carrier.

Interfaces: None.

C.4.2.2 Fleet Services

The desired outcome of Fleet Services is a high quality, safe, reliable, environmentally responsible, and regulatory compliant fleet that meets customer needs in a cost-effective, energy-efficient, and timely manner.

Key Customers

- DOE
- OHCs
- Pacific Northwest National Laboratory (PNNL)

Scope and Requirements

C.4.2.2.1 Management and Coordination of Fleet Services

The Contractor shall:

- Provide management and coordination, statistical usage tracking, and reporting on General Services Administration (GSA)-leased vehicles and DOE-owned vehicles/equipment.
- Perform vehicle repair and modification services as required. Some vehicles are designated as regulated due to contamination and are required to be serviced within radiologically-controlled areas. The scope also includes record keeping, vehicle assignment, ensuring vehicle utilization, and excess/disposal of fleet vehicles and parts.
- Manage and coordinate usage of the centralized fleet and associated property, which includes general and special purpose equipment.
- Ensure that standard and special-use leased vehicles meet minimum usage thresholds, and that vehicles and equipment are properly assigned between and amongst OHCs. GSA vehicles not meeting the Hanford Site standards shall be returned to GSA.
- Provide vehicle maintenance services, including inventory of or access to parts normally used for routine maintenance.
- Administer the specific GSA vehicle leases. If GSA is unable to provide the number of vehicles required to meet mission needs, contractors may supplement the fleet with non-GSA vehicles (e.g., commercially leased vehicles).
- Acquire (through lease or purchase), control, assign, and dispose of DOE-owned fleet equipment.
- Meet the Hanford Site utilization standards for vehicles and equipment.
- Stay within the ceiling for the number of vehicles established by GSA.
- Comply with fuel reduction goals established by DOE.

C.4.2.2.2 Records and Database Management for Fleet

The Contractor shall maintain required records and databases for fleet activity (other than those systems maintained by GSA and OHCs [i.e., for leased vehicles used under their respective contracts]), including inter-site assignment and utilization of leased and owned vehicles, excess/disposal, and maintenance. The Contractor shall manage fuel administration, as applicable.

The Contractor shall utilize four (4) primary databases for Fleet Management:

- Federal Automotive Statistical Tool (FAST) database.
- Federal Motor Vehicle Registration System (FMVRS). The Contractor shall register and maintain data in FMVRS for federally-owned and commercially-leased vehicles and mobile equipment that display official U.S. Government license plates. The Contractor shall also keep up to date the FMVRS records of U.S. Government license plates assigned to their fleet.
- Federal Fleet Management System (FedFMS). FedFMS is a web-based fleet management system that identifies, collects, and analyzes motor vehicle data with respect to costs incurred for the operation, maintenance, acquisition, and disposition of agency-owned and commercially-leased motor vehicles.
- Vehicle Fleet Maintenance system is a work control system utilized to manage fleet maintenance activities.

The Contractor shall respond to requests for routine and specialized reports required by NEPA, the Motor Vehicle Statement, FAST and FedFMS asset level data elements, and others, as requested.

C.4.2.2.3 Fleet Maintenance

The fleet shall be right-sized, to ensure best value to the Government, with the appropriate variety of vehicles to perform various mission needs for the Government. The fleet shall be managed and refreshed with replacement vehicles/equipment to maintain appropriate performance of fleet mission needs.

The Contractor shall:

- Perform routine preventive maintenance and inspections in accordance with manufacturer specifications, GSA schedules, and Occupational Safety and Health Administration (OSHA) safety regulations.
- Perform vehicle and equipment repair maintenance, as required, to maintain performance and air quality standards.
- Perform GSA non-reimbursable services, such as in-the-field service calls (including towing).
- Perform major component repair and reconstruction of failed major operating and drive train components.
- Perform auto body, glass, and upholstery repair services.
- Perform customer-specified non-maintenance mechanical support, vehicle and equipment modifications, auxiliary equipment installation and transfer, accident damage repair, and special fabrication services.
- Inspect, maintain, and repair plant/facility stationary engine-driven emergency and operations mechanical equipment installed in operating plants and facilities.
- Comply with Washington State and DOT inspection requirements.

C.4.2.2.4 Fleet Parts

The Contractor shall ensure the availability of parts required for sustaining safe and efficient fleet operations. As appropriate, and in keeping with efforts to streamline the management of onsite warehousing and inventory management, the Contractor shall:

- Manage material inventories (or just-in-time access to parts needed) and closed loop waste minimization procurement programs for parts received, stored, and dispositioned.
- Coordinate recycling efforts for recyclable materials and identify excess automotive material for disposition, including fluids and tires.
- Perform research in support of parts requirements, ordering, receipt, storage, issuing, and staging of automotive and equipment parts and materials. Perform tagging, isotopic paint identification, and disposal coordination of excess of shop tools and equipment.
- Coordinate the return of parts and cores to manufacturers, and ensure that credits are received from vendors for erroneously shipped items and/or returned parts/cores.

C.4.2.2.5 Fleet (Bulk) Fuel

The Contractor shall purchase bulk fuel for heavy equipment located on the Hanford Site.

C.4.2.2.6 Fleet Planning

The Contractor shall:

- Develop and deliver a Fleet Master Plan that documents a strategy for managing repairs, life extensions, replacements, permanent removals, and deactivations for the fleet service system including real and personal property within the scope of this Contract over the life cycle mission planning horizon and plan to execute the work scope within the 10 year period covered by this Contract. The Plan shall:
 - Align the motor carrier system with the functional requirements of the cleanup mission by displaying specific alignment with individual cleanup projects.
 - Be cleanup mission focused.
 - Contain a detailed inventory of facilities, structures, vehicles, and equipment supporting the Fleet service and shall document the condition of these items in the Plan.
 - Explain the process for determining condition. Visual inspection of the facilities, structures, vehicles, and equipment is required. If appropriate, non-destructive examination and destructive testing shall be used. Where a 100 percent visual inspection may not be feasible, a statistical sampling method shall be used and explained in the Plan.
 - Include fleet operations performance analysis and predict remedial and preventive maintenance and upgrade projects to support reliable system operation for the projected life of the service need.
 - Include NEPA and proposed infrastructure projects for the Fleet service. Develop and document regulatory strategies to address fleet system physical condition, modifications, or upgrades along with the list of the applicable regulations and industry standards. Activity based logic schedules shall be created and documented to show the progression of an activity to completion.
- Be responsible for routine maintenance (e.g., normal wear and tear) for leased vehicles including, but not limited to, such items as windshield wiper blades, windshield chip repairs, brake pads, shock absorbers, fluid replacement, and repairs due to hail or dust storms, as described in GSA standards, after the GSA warranty expires.

- Be responsible for repairs due to operator negligence and for major repairs including, but not limited to, body damage, windshield replacement, and repairs due to hail or dust storms.
- Perform as the single-point-of-contact with GSA for OHCs for vehicles assigned/leased onsite.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints:

- Mileage and fuel costs for GSA-leased vehicles are tracked directly by GSA by means of the GSA fleet credit card and do not require additional tracking and reporting.
- DOE maintains agreements with GSA with regard to vehicle leases. The monthly lease charge for vehicles typically represents the prorated cost of the vehicle (over its anticipated useful life) plus a mileage rate, which allows GSA to recover most costs associated with fuel. Repair costs are covered by the manufacturer while a vehicle is still under warranty.
- In order to properly assess vehicle usage and mileage (to set the monthly rate charge), GSA requires that each vehicle be refueled at least once/month (or that mileage be entered via the GSA website), and that GSA be notified whenever required preventative maintenance has been completed. Reporting discrepancies (such as negative mileage accrued during a month) are communicated directly with each Site contractor. GSA communicates with a single point-of-contact for OHCs assigned leased vehicles for use under their contract.

Interfaces: GSA for acquisition of vehicles, billing, and reporting.

C.4.2.3 Crane and Rigging

The desired outcome is a reliable and safe crane and rigging service that efficiently meets OHCs' needs in accordance with project schedules. In addition, the desired outcome is a right-sized crane and rigging service that helps to reduce life cycle costs over the remaining span of the Hanford Site mission.

Key Customer

- OHCs

Scope and Requirements

The Contractor shall:

- Manage and schedule operations involving movable cranes and crane and rigging services.
- Maintain and operate cranes, rigging equipment, and cable fabrication equipment.
- Provide certification of cranes, rigging equipment, and operators.
- Operate and maintain a mobile crane pool and boom yard, including performing inspections, preventive maintenance and minor maintenance to cranes and equipment; ensuring procedure control and compliance; overseeing usage and cost tracking; providing customer coordination and support; performing customer planning and scheduling; and wire rope procurement, control, and replacement.
- Assemble, erect, and disassemble scaffolding.
- Chair the Site Hoisting and Rigging Committee.
- Gather and analyze utilization information and forecast the capacity of the crane pool.

- Coordinate hoisting and rigging activities with OHCs.
- Maintain DOE/RL-92-36, *Hanford Site Hoisting and Rigging Manual*, and the Hanford Site Hoisting and Rigging intranet web site.
- Maintain the Crane and Rigging Service Master Plan. Develop and deliver a Crane and Rigging Service Master Plan no later than June 1 on even calendar years. The Plan shall:
 - Document a strategy for managing repairs, life extensions, replacements, and deactivations for facilities and equipment for the crane and rigging service within this contract over a 10 year planning horizon.
 - Contain a detailed inventory of facilities, structures, cranes, and equipment supporting the crane and rigging service and shall document the condition of these items in the Plan.
 - Explain the process for determining condition as discussed above. Visual inspection of the facilities, structures, and equipment is required. If appropriate, non-destructive examination and destructive testing shall be used. Where a 100 percent visual inspection may not be feasible, a statistical sampling method shall be used and explained in the Plan.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: WTP will provide its own crane and rigging.

Interfaces: None.

C.4.3 Safeguards and Security

C.4.3.1 Protective Forces

The desired outcome for the Protective Forces function is a highly trained, qualified, fit, and armed protective force to ensure the physical protection of Hanford Site special nuclear material (SNM), classified materials, industrial assets, and mitigate and deter radiological and toxicological sabotage events.

Key Customers

- DOE
- OHCs
- PNNL

Scope and Requirements

The Contractor shall respond to alarms and other emergencies/incidents 24/7; operate a 24/7 Patrol Operations Center that provides dispatch and emergency communications capability to the entire Hanford Site, including 9-1-1 medical dispatch; operate Hanford Site barricades; provide mutual aid support to local law enforcement agencies and others as identified consistent with DOE agreements; provide facility and duress alarm monitoring; manage and operate the Patrol Training Academy (PTA); and provide Hanford Site security surveillance.

C.4.3.1.1 Hanford Patrol

The Contractor shall provide Security Police Officers (SPO) I, II, and III, as appropriate, for the protection of Hanford Site targets and assets, consistent with the material/resources being protected and the current Design Basis Threat (DBT) and/or DBT implementation plan (IP). SPO tactical response

implementation shall be in accordance with DOE-approved risk and vulnerability assessments (VA), Hanford Site Security Plan, and Security Incident Response Plan (SIRP). The Contractor shall provide a fully trained and qualified response force including (but not limited to) Tactical Response Teams, Special Response Team (SRT) combatants, rovers, alarm monitoring personnel, emergency dispatch personnel, K-9 teams, access control personnel, supervisors, trainers, administrators, and managers. The Contractor shall also provide armed emergency response of a general nature to the Hanford Site, using a graded security approach.

Consistent with DOE agreements, elements of the Hanford Protective Force, including canine (K-9) and operational support, may be made available on a non-mission interference basis to others (e.g., local law enforcement agencies, school systems, and other local/state/federal agencies) upon notification to DOE and with appropriate coverage maintained on the Hanford Site, in response to threats of violence and requests for police assistance/mutual aid. In support of DOE, and consistent with the Contractor's SAS scope, the Contractor shall comply with existing DOE agreements (e.g., Memorandum of Agreement [MOA]/Memorandum of Understanding [MOU]) with other law enforcement and federal agencies. The Contractor may be requested to periodically provide input on roles and responsibilities delineated in these MOAs/MOUs as it relates DOE's ability to meet its commitments.

The Contractor shall administer a credentials and shields program including, but not limited to, inventory, issue, control, and securing Hanford Patrol identification credentials and shields.

C.4.3.1.2 Patrol Operations Center

The Contractor shall maintain and operate a 24/7 Patrol Operations Center to provide emergency dispatch capability to the Hanford Site. Entities served shall include the Benton County Sheriff's Office (BCSO), local emergency preparedness (EP) organizations, DOE, Hanford Fire Department (initial incident notification), and other agencies as agreed to with DOE concurrence.

The Contractor shall:

- Conduct driver's license, registration, and criminal checks as requested by DOE or Local Law Enforcement Agencies.
- Serve as the DOE single point-of-contact during off-shift hours.
- Provide direct emergency communication with the Energy Northwest, PNNL control room, and Southeast Communications Dispatch Center.
- Provide a daily status report on security-related items that occurred within the preceding 24 hour period, including reporting disposition of law enforcement events that affect the Hanford Site.
- Prepare and issue incident reports on security anomalies.
- Provide "Open Skies" (as defined by Multilateral Agreement on the Liberalization of International Air Transportation) notifications and event notifications; communications for Protective Forces personnel and onsite law enforcement officers, including law enforcement computer checks, off-hours phone communication services for DOE, EP alarm testing, and access authorization checks for processing badge requests/issues (lost or forgotten) during off-shift hours.
- Provide onsite tracking of radioactive shipments, serve as the single point-of-contact for Hanford Site outbound radioactive/hazardous material shipments, and provide support for inbound shipments.

- Provide onsite emergency communication/notification actions and notifications to state, regional, and DOE-HQ during emergency events.
- Provide alarm and duress monitoring for Hanford Site alarmed facilities, and secondary SNM security alarms (such as Interim Storage Area [ISA]).

C.4.3.1.3 Patrol Training Academy

The Contractor shall, at a minimum:

- Develop an annual Patrol Training Plan that specifies how Hanford Patrol will provide required training and certifications, and submit to DOE for approval.
- Train and certify assigned employees in accordance with the approved annual Hanford Patrol Training Plan. Provide initial and recurring required security, protective force, and firearms training, and fitness qualification testing.
- Provide exercise physiologist support for armed personnel.
- Provide job task analyses and needs assessments for assigned employees for training and safety purposes.
- Create and maintain required training records, lesson plans, and course documentation.
- Coordinate training needs/issues with the DOE National Training Center (NTC).
- Safely operate live-fire open ranges on the Hanford Site.
- Provide DOE certified armorer support, inspections, and testing of Hanford firearms.
- Provide training support to state and local law enforcement agencies, other federal and external agencies, as directed and approved in accordance with work authorization and funding, without impact to SAS operations.
- Provide capability for long distance learning and interactive television training.
- Manage and operate the Emergency Vehicle Operations Course.

The Contractor may field a team for DOE-HQ sponsored events.

C.4.3.1.4 Protective Forces Management and Administration

The Contractor shall:

- Acquire inventory, excess, and control assigned sensitive equipment and make general purchases (e.g., uniforms, holsters, radios, ammunition) for protective forces. Further, the Contractor shall maintain a continuous accountability of sensitive equipment/items in the Hanford Patrol inventory, and provide a Patrol Sensitive Equipment/Items Report to DOE annually.
- Procure through DOE, some weapons and ammunition or peripheral type equipment, on an as-needed basis, in situations when federal law restricts Contractors from procuring directly from the suppliers.
- Provide specialty assignments within the SRT, such as breachers and snipers, in accordance with the security configuration strategy.

- Develop and execute, as realistically as possible (e.g., breeching, simunition), validation performance test plans for detection and intervention capabilities of possible malevolent incidents.
- Conduct at least four (4) force-on-force (FOF) exercises annually that include the protection measures necessary to appropriately respond to complex scenarios that train/test on realistic and reasonable potential adversary events. Conduct engagement simulation systems, (such as multiple integrated laser engagement systems) training exercises and performance testing for Hanford Patrol, including onsite and offsite competitive shooting events. FOF exercise test results shall be reported to DOE. The complete full-spectrum adversary scenario may be broken up and tested into no more than two (2) selective elements (e.g., target defense, pursuit/recapture/recovery) at different times each fiscal year.
- Appropriately rotate Protective Forces personnel for FOF training/exercise purposes to ensure that personnel on each shift are trained annually.
- Ensure Contractor SAS personnel are available to support DOE 24/7 (e.g., a staff duty officer).
- Act as or provide support to the Incident Commander (IC) under the Incident Command System.
- Participate in EP planning, drills, and exercises.
- Provide immediate management response in the event of a Hanford Site declared emergency.
- Maintain and update the Patrol SIRP for Hanford Patrol response to specific targets and general emergencies. Specific support may include providing security support for visitors, as requested by DOE, and crowd control in the event of an emergency, crisis, strike support, or demonstration.
- Provide line management of Hanford Patrol personnel and administer applicable collective bargaining agreement(s).
- Ensure the DOE CO and other involved DOE organizations are notified of applicable collective bargaining agreement(s), associated activities, and other issues.
- Provide a Strike Contingency Plan and implement, if necessary, to operate the Site in the event of a work stoppage by the Hanford Patrol.
- Provide strike support personnel to other sites as requested by DOE (may be separately funded by both direct and indirect means by the supported site).
- Maintain a qualified group of personnel to ensure limited operations (i.e., high and medium assets/targets are provided full coverage) in the event of a work stoppage by the Hanford Patrol.
- Provide special searches for prohibited articles in accordance with DOE and Hanford Site requirements.
- Staff the Wye, Yakima, and Rattlesnake barricades to ensure traffic flows adequately and does not result in unsafe conditions, and that identification and security searches/checks are made in accordance with SAS procedures. The Wye and Yakima barricades are staffed 24/7, and the Rattlesnake barricade is operational during peak work hours in support of Site cleanup and operations missions. Barricade hours of operation and staffing levels are subject to modification during periods of delayed work start and/or early work release situations.
- Coordinate advance approval from DOE for changes to Hanford Site barricade(s).

- Maintain a liaison with the BCSO for information on Hanford Site thefts and other issues of mutual concern, and integrate and coordinate the Contractor's work scope with the BCSO functions.
- Maintain a log of BCSO deputy arrivals and departures from the Site, and provide to DOE as requested. The log shall include date, time, and identity of officers on Site.
- Provide notification to OHCs and DOE when an individual's Site access has been restricted.
- Provide qualified personnel to augment the DOE-HQ Composite Adversary Team approximately three (3) to four (4) times each year.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints:

- DOE has a prime contract directly with the BCSO for Hanford Site law and traffic enforcement services. This contract with BCSO includes, but is not limited to, traffic control/enforcement on the Hanford Site, local criminal intelligence support, SNM recapture/recovery capabilities, roadblocks and river evacuation, aerial surveillance and river patrol, and response to suspected or reported violations of criminal law, including apprehension and arrest.
- References to Protective Forces shall remain "Hanford Patrol" including but not limited to, badges, uniforms, vehicles, and signage. Changes shall be approved by DOE.
- The WTP construction contractor provides its own industrial security within the fenced area of the construction site.
- If protective force services, such as alarm monitoring, are used by PNNL off the Hanford Site, the Contractor shall provide an arrangement for PNNL to pay for these services. The arrangement shall include scope, schedule, budget, and performance metrics.

Interfaces: Local, state, and federal law enforcement agencies in accordance with DOE MOUs for roles and responsibilities and to reach agreement regarding Mutual Aid, the Yakima Training Center, and the DOE NTC, for the purpose of meeting training needs.

C.4.3.2 Physical Security Systems

The desired outcome is a graded and integrated Physical Security Systems for the Hanford Site that ensures DOE safeguards and security interests and/or assets are protected from theft, diversion, sabotage, espionage, and compromise with no adverse effects to national security, program continuity, the environment, or the health/safety of employees and the public.

Key Customers

- DOE
- OHCs
- PNNL

Scope and Requirements

The Contractor shall ensure the Physical Security System function is a standardized and well-coordinated program implemented in the areas of nuclear security, industrial security, and asset protection. DOE will review and approve SAS arrangements or changes prior to new 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 and/or boundaries, entry/access control systems/procedures).

The Contractor shall be responsible for management and oversight of Physical Security Systems activities as agreed to with OHCs (where changes involve their facilities or operations).

The Contractor shall:

- Adopt the existing Badging IP within 120 days of NTP. Review and update IP, as necessary, for DOE approval.
- Provide Contractor security representatives for Hanford Site facilities or groups of facilities where there are important SAS assets/interest, and integration is essential for superior performance (e.g., ISA, solid waste operating facilities, Canister Storage Building).
- Develop, or assist in the development of, facility asset protection requirements, and conduct annual reviews of Asset Protection Agreements.
- Establish and prioritize protection measures sufficient to prevent malevolent acts, such as theft, diversion, and radiological sabotage, and respond to adverse conditions, such as emergencies caused by natural disasters.
- Implement integrated Physical Security Systems elements.
- Conduct performance testing:
 - Provide performance testing and test documentation of interior and exterior intrusion detection sensors, entry/exit screening devices (portable and portal SNM and metal detectors, x-ray machines, explosive detectors), and duress alarms in accordance with DOE requirements.
 - Integrate security system/sensor performance test programs to ensure that tests include operability and effectiveness testing in accordance with established DOE approved security system sensor testing criteria.

C.4.3.2.1 Intrusion Detection/Assessment

The Contractor shall:

- Consistent with a graded SAS concept, ensure the Intrusion Detection/Assessment program includes computer-based security alarm and assessment system for accountable quantities of nuclear material on the Hanford Site. The Physical Security Systems shall include industrial security alarms for administrative buildings, personnel duress, protection of Government property, and Hanford Site perimeter/barricade intrusion detection and assessments.
- Provide design and engineering services for the installation and maintenance of Hanford Site security systems.
- Develop specifications for equipment, engineering change notices, work instructions and preventive maintenance procedures.
- Provide computer and software engineering services for the installation and maintenance of Hanford Site security systems. This includes equipment specifications, software procurement development and modification, and maintenance of documentation for the computer-based alarm-monitoring systems. Dedicated staff shall provide 24/7 support for troubleshooting and

resolution of computer system problems. Included with this area is the system administration for the Hanford Industrial Security Alarm Monitoring System and the Patrol Operations Center 9-1-1/Computer-Aided Dispatch system.

- Maintain, and upgrade as necessary, the Patrol Operations Center, Central Alarm Station systems, and the Secondary Alarm Station systems and communications multiplexers.
- Provide management and oversight of intrusion detection systems installation and maintenance activities (e.g., SNM-related detectors and alarm systems).
- Routinely pursue activities that identify SAS technology improvement/upgrade needs, evaluate commercially available products that may enhance Hanford capabilities, and monitor equipment installed at testing facilities to assess its reliability over an extended period.

C.4.3.2.2 Technical Security

The Contractor shall:

- Be responsible for evaluating, integrating, designing, and maintaining SAS technology for the Hanford Site to protect SNM, classified information, facilities, Government assets, and personnel located on the Hanford Site and offsite leased facilities.
- Prepare technical evaluations, IPs, and feasibility reports in support of technology evaluations.

C.4.3.2.3 Entry/Access Control

The Contractor shall:

- Provide management and oversight of entry and access control systems, including installation, administration, and maintenance activities, except for gate 127, for access to the MAPR facilities.
- Perform maintenance of facility entry and access control systems (including search equipment used for prohibited articles and SNM) to ensure protection of SNM, classified matter, and Government property.
- Develop and maintain a random search/security badge inspection program, host-visitor requirements, a prohibited articles policy, and provide program documentation in Hanford SAS procedures.

C.4.3.2.4 Central Badging

The Contractor shall:

- Provide badge services for the Hanford Site unless, specifically excluded (for example, if responsibility has been contractually assigned to another DOE Contractor).
- Request, receive, issue, destroy, control, and account for HSPD-12 Personal Identity Verification (PIV) credentials, Hanford Specific (Commercial Identity Verification/Local Site Specific Only), and temporary badges (i.e., visitor badges).
- Process and account for security credentials and badges and track the disposition of badges, (e.g., lost, expired, returned) for Hanford Site employees, contractors, visitors, vendors and others assigned to, or visiting, Hanford Site facilities consistent with specific MOAs (e.g., WTP).
- Provide computer (hardware and software) systems, image capture equipment, printers, badge stock, and other infrastructure support items to the Central Badging Office, and to alternate badging

locations in facilities deemed critical facilities by DOE (e.g., Federal Building and 2440, 2430, and 2420 Stevens Center Place).

- Control and maintain the Hanford Site Personnel Security Clearance Record or predecessor system and the Digital Imaging System, complete required database/hardware/software upgrades, and provide programming support when new badge configuration becomes necessary (e.g., Hanford Sitewide rebadge effort).
- Coordinate and initiate “STOP ACCESS” procedures as requested by DOE and OHCs authorized personnel, control and issue private vehicle passes for Property Protection Areas, and coordinate with satellite badging offices, as appropriate.
- Conduct fingerprinting in support of HSPD-12 and security clearance processing activities, as required by DOE directives and DOE supplemental direction; coordinate with the Foreign National Visits and Assignments (FNVA) Program office to ensure requirements are met before badging foreign nationals; and verify security clearance levels for cleared visitors from other DOE sites, or other federal agencies, before granting access to limited or protected areas.

C.4.3.2.5 Explosive Detection

The Contractor shall:

- Provide systems maintenance for the explosives detectors on the Hanford Site, conduct preventive and repair maintenance for detectors and support equipment, and procure maintenance materials and consumable supplies.
- Procure, train, maintain (veterinary services, kenneling), and use K-9s for explosive detection.
- Procure K-9s from an approved source that provides fully trained explosive detection K-9s that meet current standards, and possess the capability to train K-9 handlers by such standards.
- Train and certify explosive detection K-9s in accordance with standards.
- Maintain a level of accuracy consistent with current standards for explosive detection K-9 teams.
- Employ teams and maintain response capabilities as required by the SIRP, Hanford Patrol post orders, established MOUs, and mutual aid agreements.
- Ensure the Performance Assurance Group conducts tests and drills to ensure the K-9s’ accuracy, and the team’s ability to detect and mitigate explosive threats to the Hanford Site.
- Kennel and maintain K-9s in accordance with locally established protocols and the Contract. Medical care and health maintenance for the K-9s shall be provided by an approved, licensed Doctor of Veterinary Medicine.
- Ensure K-9 kennels shall have no permanent fixtures (such as cement) at the handler’s residence. Kennels shall be pre-built, insulated, and have no potential hygiene or flooring issues. Additionally, the unit will be treated as Government property and transferred from the current Hanford K-9 handler to the next Hanford K-9 handler and/or excessed.

C.4.3.2.6 Engineering and Maintenance (Security Systems)

The Contractor shall:

- Design and maintain physical security and access control systems for Category I and Category II SNM locations, radiological/toxicological targets, and industrial security activities.
- Design security system upgrades for existing facilities with changing requirements, and modify and maintain installed systems to prolong system life or improve efficiency.
- Design security systems for new facilities based on DOE specifications, risk assessments, and project operations. Security systems requirements shall be included in the functional requirements document and facility design reviews.
- Coordinate roles and responsibilities with OHCs such that proposed changes to security configurations/systems in their facilities or affected operations are coordinated, integrated and approved by the Contractor.
- Install new security systems to ensure compliance with engineering specifications and DOE reliability requirements with minimal need for recurring expenses.
- Perform preventive maintenance and correct system failures to maintain a high degree of reliability and uptime for security systems.
- Implement compensatory measures in a timely fashion for security systems that are, or become, unavailable for whatever cause including notification to DOE of implementation of said compensatory measures.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: The acceptability of K-9 kennel purchases is based on the kennel being identified as Government property and not owned by the K-9 handler.

Interfaces: MAPR and/or its contractor.

C.4.3.3 Information Security

The desired outcome is an Information Security program that is compliant with DOE requirements and ensures the protection of sensitive and classified information and materials on the Hanford Site.

Key Customers

- DOE
- OHCs
- PNNL

Scope and Requirements

The Contractor shall have a centralized Information Security program that collaborates with OHCs and consists of Operations Security (OPSEC); Classified Matter Protection and Control (CMPC); Classification, Declassification, and Unclassified Controlled Nuclear Information (UCNI); Controlled Unclassified Information (CUI); Technical Surveillance Countermeasures (TSCM); and critical infrastructure. This scope includes the operation and management of the Classified Document Control Center and classified information in the Records Holding Area.

The Contractor shall be responsible for identifying and protecting classified and unclassified sensitive information generated, processed and stored for the Contractor's own work scope, and supporting OHCs, and their subcontractors, as delineated within these sections. The Contractor shall develop procedures/processes to ensure compliance with DOE directives through Hanford Sitewide policies and procedures for specific programs within Information Security. The Contractor shall integrate components of the Information Security program into a cost-effective series of mutually supporting programs.

C.4.3.3.1 OPSEC

The Contractor shall appoint an OPSEC Program Coordinator to manage the OPSEC program for the Hanford Site, as well as for the Contract. In general, OHCs have the responsibility for day-to-day OPSEC implementation and to perform the necessary management and support functions required for an effective OPSEC program for their companies, consistent with the Contractor's overarching OPSEC program.

For the Hanford Site, the Contractor shall:

- Implement a Hanford Sitewide program to ensure that sensitive information is protected from compromise and secured against unauthorized disclosure.
- Ensure conformity of implementation with OPSEC standards and requirements by the performing OHCs.
- Annually review and update the Critical Information List to ensure it reflects current assets, threats, operations, and other relevant factors.
- Conduct OPSEC assessments of Hanford Site facilities having Category I SNM (or credible roll-up to Category I SNM) and conduct OPSEC reviews of Hanford Site facilities that have the potential to process or store classified or sensitive information.
- Provide security expertise for export control information (ECI), applied technology (AT), and other CUI.
- Conduct reviews of artifacts, prior to release for public viewing or release to external partners, to ensure there are no CUI concerns.

C.4.3.3.2 Classified Matter Protection and Control

The Contractor shall:

- Support asset protection reviews for facilities that contain classified matter, and maintain an updated list of security containers, locations, and custodians.
- Approve copiers and shredders used in classified document reproduction or destruction, continuously reduce unneeded classified matter, and investigate potential and actual compromises of classified information.
- Provide CMPC training to cleared personnel, including to OHCs.

C.4.3.3.3 Classification, Declassification, and UCNI Program

The Contractor's Classification, Declassification, and UCNI Program shall also support OHCs and subcontractors in determining the proper classification of information. The Contractor shall ensure 100 percent review and identification of documents generated in a potentially classified subject so that information is appropriately classified, marked, disseminated, and stored.

The Contractor shall:

- Nominate a Classification Officer (approved by DOE) to manage and conduct the Classification, Declassification, and UCNI Programs for the Hanford Site.
- Coordinate the declassification of Hanford Site documents and Hanford legacy documents, as necessary.
- Coordinate the destruction of classified records in accordance with a schedule approved by DOE.
- Ensure that its management, as well as other onsite Contractor management, is informed of potentially classified subject areas, and inform its employees of sensitive and potentially classified topical areas.
- Ensure that appropriate classification guidance is available to Hanford Site organizations that are potential generators of classified information.
- Ensure that a sufficient number of Derivative Classifiers are appointed, approved (by the Contractor's Classification Officer), and trained within applicable Hanford Site organizations and have sufficient classification guidance available to perform their duties.
- Ensure that a sufficient number of Derivative Declassifiers are appointed, approved, and trained within applicable Hanford Site organizations to conduct the declassification reviews.
- Ensure that a sufficient number of Reviewing Officials are appointed, approved (by the Contractor's Classification Officer), and trained within applicable Hanford Site organizations to conduct appropriate reviews of potential UCNI, and have sufficient UCNI topical guidance available to perform their duties.
- Complete an annual Accountable Matter Inventory by October 31 of each year.
- Provide the DOE Classification Officer with the number of Derivative Classifier documents reviewed (to include document categories) on a quarterly basis.
- Operate and manage a single Classified Document Control Center and a Classified Records Holding Area for the proper receipt, storage and maintenance, distribution, control, protection, and disposition of classified matter produced, and received for OHCs, DOE and other Government or Contractor entities, as directed.
- Prepare working procedures that include management of designated accountable classified removable electronic media, classified Records Holding Area operations, and general receiving, processing, distributing (including each means of mailing), copying, scanning, and destruction of classified matter.
- Retrieve classified matter transmitted by U.S. Postal Service Registered Mail from the Post Office on Government workdays.
- Maintain statistical data by entry on the following:
 - Documents generated;
 - Documents destroyed;
 - Document received; and
 - Documents transmitted.

C.4.3.3.4 Controlled Unclassified Information

The Contractor shall:

- Manage, integrate, and oversee implementation of a common Hanford Sitewide CUI program that includes identification of sensitive unclassified information as CUI.
- Ensure conformity of implementation with CUI standards and requirements by the performing OHCs.
- Ensure that Contractor documents released to the public or assigned a formal document number and tracked in a document control system are reviewed for CUI. This includes documents released to the public that are not given a formal document number (e.g., presentations, notices, press releases, and information contained or posted on the internet).
- Coordinate and perform CUI education and awareness.

C.4.3.3.5 Technical Surveillance Countermeasures

The Contractor shall:

- Appoint a TSCM officer. The TSCM officer interfaces with the federal TSCM Operations Manager, and in general, coordinates and manages the TSCM program, and dispositions TSCM findings.
- Identify Hanford Site facilities that qualify for TSCM services to support processing of classified information and shall coordinate TSCM services with the target facility and DOE.
- Keep the number of classified conference rooms to the minimum necessary to conduct business activities effectively.

C.4.3.3.6 Critical Infrastructure

The Contractor shall ensure that information systems, that are critical to the Hanford Site mission and require protection from internal and external threats, are maintained. The Contractor's program shall include identification of critical systems, (e.g., process control systems, fire alarms/systems, criticality alarms, security systems, telephone switches, network components) and evaluation of the protection afforded to each system.

The Contractor shall ensure that organizations responsible for each system adequately protect those systems.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints:

- DOE will be responsible for the maintenance and management of the DOE Federal OPSEC and CMPC programs.
- The Contractor classification responsibility shall be limited to documents generated by Hanford Contractors, both current and in the past (may be in long term storage).
- DOE has authority over Contractor generated information.
- The Contractor shall provide services to the MAPR and/or its contractor for Classification, Declassification, and UCNI Programs.

Interfaces: None.

C.4.3.4 Personnel Security

The desired outcome is a Personnel Security function that provides access authorizations, and other elements of the Program reliably and efficiently, such that employee access to information/facilities in the execution of their assigned duties on the Hanford Site is readily obtained, while ensuring national security and protection of classified information and SNM.

Key Customers

- DOE
- OHCs
- Hanford Site Subcontractors

Scope and Requirements

The Contractor shall:

- Provide a centralized Personnel Security Program. The elements of the program shall include aspects of the Access Authorization (Clearance) Processing Program, Human Reliability Program (HRP), the Unclassified FNVA Program, and official foreign travel. The key customers are responsible for identification of individuals requiring badges, clearances, HRP processing, providing this information to the Contractor, and developing internal implementing procedures for these activities.
- Process security clearances in support of key customers. These activities include requesting, obtaining, maintaining, downgrading, and terminating security clearances, including special access privileges (such as SIGMA). The clearance processing program shall include reviews of each requested clearance action to ensure adequate justification exists and that reporting requirements are met.
- Process and request, through USAccess, non-clearance HSPD-12 PIV credentials in support of DOE and key customers.
- Review security clearance justifications on a periodic basis to keep the number of clearances to the minimum necessary for work execution. At least 95 percent of clearances shall be justifiable at any given time.
- Report derogatory information, name changes, and other reporting requirements that pertain to cleared individuals to DOE, in accordance with established DOE timeframes.
- When requested by DOE, provide projections of security clearance investigations and associated costs (anticipated annually) for key customers.
- Establish a clearance processing program that includes processes for obtaining security badges, keys, and proximity cards from terminating employees and coordinate with security operations to remove such individuals from automated access control systems.
- Obtain pre-employment/pre-clearance suitability investigation information on current and prospective employees of OHCs and their subcontractors; and conduct pre-clearance suitability investigations on employees of other subcontractors performing work in support of the Hanford Site mission.

C.4.3.4.1 Human Reliability Program

The Contractor shall:

- Provide a HRP Management Plan to DOE for approval within 120 days of NTP, review, and update the plan annually.
- Administer the Hanford Site HRP (excluding the DOE HRP). The Contractor shall serve as the focal point for coordination of activities between the DOE HRP Certifying Official, the onsite medical provider, management, industrial relations/human resources personnel, drug testing technicians, and others as necessary. The Contractor shall prepare an HRP management/IP for DOE approval. The Contractor shall make notification of HRP status change (e.g., disqualification/requalification, positive drug/alcohol test results, drug/alcohol testing for an occurrence or reasonable suspicion, failure to report for drug/alcohol testing, security concerns) to those entities as necessary.
- Notify DOE of HRP disqualifications, positive drug/alcohol test results, and drug/alcohol testing for an occurrence or reasonable suspicion within four (4) hours.
- Provide a written description/report of the circumstances associated with an HRP status change to DOE within one (1) working day from the time of the incident.
- Initiate and track activity associated with HRP personnel during the HRP review and approval process, and ensure completion of this process for each individual by the DOE established due date. This includes maintaining both hard copies and electronic files for each HRP employee.
- Coordinate and track Hanford Site drug/alcohol testing required by the HRP to include initial, random, annual, reasonable suspicion, and occurrence testing. The Contractor shall also ensure random testing occurs at the rate required for completion of annual testing as required, and the conducting of off-shift testing at least once each month.
- Develop and administer the Hanford Site HRP training program (HRP initial and refresher training) for HRP employees and their managers, and ensure completion and documentation of training.

C.4.3.4.2 Unclassified Foreign National Visits and Assignments

The Contractor shall:

- Provide a Sitewide FNVA IP for DOE approval within 120 days of NTP.
- Approve security plans for foreign national visitors to Hanford Site security areas and coordinate FNVA requests with the host, OPSEC, Counterintelligence, management, and DOE, or DOE to ensure identification of potential concerns and resolution before approval of the visit/assignment.
- Enter badge requests for approved visits/assignments into the badging database and prepare an escorted and/or unescorted access credential if a foreign national is approved for unescorted access.
- Conduct FNVA Host training and assist OHCs, as necessary, in the development and coordination of FNVA security plans.
- Enter visit and assignment information into the DOE visits and assignments database and Hanford FNVA database, maintain records of visits and assignments, and prepare reports as requested.

C.4.3.4.3 Official Foreign Travel

The Contractor shall administer an effective and efficient Official Foreign Travel Program that aligns travel needs with mission needs, including coordinating timely forecasts for Contractor and OHC travel.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints:

- DOE will conduct pre-employment checks for federal personnel and manage the HRP of federal employees.
- WTP construction will conduct pre-employment checks for their employees.
- Central badging support to DOE shall include procurement, installation, and maintenance of computer (hardware and software) systems, image capture equipment, printers, badge stock, and other infrastructure support items.

Interfaces: None.

C.4.3.5 Nuclear Materials Control and Accountability

The desired outcome is an MC&A program that provides credible positive assurance that the Hanford Site nuclear materials are present in their stated quantities and locations, and those intentional or unintentional acts that would put at risk the nuclear material inventory are prevented/deterred, or detected and mitigated.

Key Customers

- DOE
- OHCs
- Hanford Site Subcontractors

Scope and Requirements

Integrate the MC&A program with OHCs' plans, programs, and activities at life cycle stages, and other elements of the SAS program. The MC&A program shall proactively factor in MC&A requirements, systems, and technologies in the planning, design, construction, and operation of new or renovated DOE facilities and activities.

The Contractor shall:

- Manage and conduct a centralized MC&A Program for accountable quantities of nuclear material on the Hanford Site.
- Create, maintain, and provide a single, integrated MC&A Plan for use by OHCs performing MC&A activities.
- Assign a Manager of MC&A as the Hanford Site MC&A management official and MC&A interpretive authority, organizationally independent from operations and programs/projects, with overall responsibility for MC&A.
- Appoint Nuclear Material Representatives (NMR) and NMR alternates to oversee the control and accounting of reportable quantities of nuclear materials.

- Approve and periodically evaluate nuclear materials custodians for approved Material Balance Areas under the Hanford Site Contractor(s) where nuclear materials are stored, processed, or used.
- Provide the final authorization for shipments offsite, and processing or new/modified storage arrangements of Category I-IV nuclear materials.
- Provide nuclear materials accounting and reporting services for Hanford Site nuclear material, both active and inactive (such as V-RIS), and be responsible for official nuclear material inventory, including discrepancy reconciliation. Maintain backups of nuclear material accounting database information and associated programs. Enter information into the Local Area Network Material Accountability System, produce reports and ad hoc inquiries, maintain and protect nuclear material accountability records, and evaluate inventory.
- Facilitate and coordinate MC&A activities with OHCs to include subcontractors, and review and approve MC&A-related procedures (e.g., nuclear materials access, handling, storage).
- Ensure the MC&A program incorporates application to nuclear materials unearthed, exhumed, retrieved, recovered, or removed from waste sites, where required.
- Support and facilitate nuclear material transfers, required interfaces and agreements, documentation, shipping and handling, for OHCs' nuclear material disposition programs, to include previously safeguards terminated nuclear material inventory.
- Purchase, regulate, and manage MC&A-controlled forms and Tamper Indicating Devices (TID) used by OHCs and their subcontractors. Account for MC&A TIDs and controlled forms in storage or use.
- Provide nuclear materials measurement system approvals and measurement system control requirements for Hanford Site MC&A nuclear materials measurement activities.
- Monitor measurement control information, collect and analyze measurement control information, calculate control limits and monitor equipment performance against those limits, qualify measure equipment/methods and review measurement procedures, calculate and publish acceptance/rejection criteria for accountability/verification/confirmation measurements, and evaluate shipper/receiver differences.
- Ensure periodic inventories are conducted by nuclear material custodians, and serve as the lead scheduler for inventories consistent with the programs/projects integrated schedules.
- Perform safeguards occurrence investigation and reporting.
- Conduct special studies as requested by DOE and OHCs.

The Contractor shall be the primary point-of-contact and coordinate with the involved OHCs on International Atomic Energy Agency (IAEA)-related activities. The Contractor, in cooperation with other affected OHCs, shall provide information flow between them and the DOE/IAEA; host and escort IAEA inspectors while on the Hanford Site; organize and plan IAEA related activities; organize IAEA related briefings; maintain IAEA inspector records related to radiation exposure, training, and access authorization; and create and maintain inspection records. The Contractor shall prepare IAEA nuclear material reports, prepare and distribute reports on inspection activities, and maintain the Design Information Questionnaire report.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: The Contractor shall not possess nuclear materials; should the need arise to be a custodian of nuclear material, registration and approvals will be required.

Interfaces: None.

C.4.3.6 Safeguards and Security Program Management

The desired outcome is a well-planned, budgeted, managed, and executed SAS Program that effectively and uniformly protects security interest/assets on the Hanford Site.

Key Customers

- DOE
- OHCs
- WTP

Scope and Requirements

The Contractor shall:

- Establish, manage, integrate, and execute a variety of processes and services that collectively make up the SAS Program Management elements.
- Establish a centralized SAS Program Management function for the Hanford Site within the Contractor organization. Collaborate, to the maximum extent possible, with OHCs.
- Within one (1) work week of notification of formal change(s) from DOE, commence execution of changes to SAS requirements, processes, or procedures to affected OHCs, and track changes through completion.
- Within one (1) year of completion of transition, provide DOE a business case analysis for consolidation of the Patrol Operations Center, Emergency Operations Center (EOC) Shift Office, and Hanford Fire Department Dispatch.

C.4.3.6.1 Safeguards and Security Program Planning, Oversight, and Administration

The Contractor shall:

- Provide overall management and assessment of the SAS Program, taking a lead role in coordinating and integrating SAS operational planning activities on a Hanford Sitewide basis.
- Continually evaluate business and technical approaches to optimize SAS operations, and function as the primary interface with DOE on SAS operations and issues.
- Provide SAS program planning, conduct collection/integration of SAS information and needs from users, ensure SAS is well integrated with other Hanford Site projects' baselines; report monthly SAS performance (to include analysis of cost performance); and report other performance information, as required.
- Provide annual and ad hoc program planning documents and budget formulations, and SAS program-level reports and presentations as requested by DOE.

- Reduce/adjust SAS scope and personnel commensurate with changes in Hanford Site cleanup, offsite shipping of SNM, and operational needs/requirements, within four (4) months of the change (excludes changes that require a significant increase in SAS scope).
- Increase/adjust SAS scope and personnel in accordance with the baseline needs of the projects, such as possible changes to safeguards categories and attractiveness levels. For upgrades to security systems associated with new and/or existing facilities, consistent with and in addition to Section C entitled, *Engineering and Maintenance Security Systems*.
- Evaluate and implement technology, when reasonable, into the SAS Program to continually increase efficiency, reduce manpower resources (where reasonable), and reduce the cost of SAS in support of Hanford Site projects, activities, and facility-specific applications.
- Serve as a single point-of-contact to the DOE for day-to-day SAS operations activities and overall Hanford Site security posture, and coordinate DOE SAS tours, as required.
- Develop and deliver to DOE a SAS Master Plan that documents a strategy for managing repairs, life extensions, replacements, and deactivations for security systems, including systems that support command and control, physical security systems and related cyber networks, and classified cyber systems over a 10 year planning horizon.

C.4.3.6.2 Security Conditions

The Contractor shall:

- Conform to the DOE Security Conditions system that has been aligned with the Homeland Security Advisory System.
- Coordinate and integrate standardized protective measures for a wide range of threats and help disseminate appropriate, timely, and standardized information for the coordination and support to OHCs in the event of a crisis or emergency.

C.4.3.6.3 Hanford Site Security Plan and Other Safeguards and Security Plans

The Contractor shall:

- Develop a single Hanford Sitewide Security Plan for DOE.
- Lead the development of the Hanford Site Security Plan with participation from OHCs to provide assurance that SAS measures address identified threats and risks.
- Review the Hanford Site Security Plan on an annual basis, and coordinate updates with OHCs, as necessary.
- Lead and develop other SAS plans in accordance with DOE requirements, or as necessary, based on emergent work.

C.4.3.6.4 Vulnerability Assessments

The Contractor shall:

- Develop, prepare, maintain, and update VAs, security analyses, technology evaluations, IPs, feasibility reports, and special SAS studies as required for the Hanford Site, and provide this information to DOE as developed and finalized. Scoping, creation, modeling, and validation shall fully involve and be coordinated with OHCs.

- Routinely (for example, quarterly) assess the basis and assumptions of VAs and security plans/documents to maintain their currency consistent with planned and actual program/project changes on the Hanford Site by others, and in accordance with approved update schedules.
- Maintain VAs current with changing Hanford Site conditions.

C.4.3.6.5 Design Basis Threat

The Contractor shall:

- Implement an integrated set of Hanford Site specific SAS actions, technologies, procedures, and processes.
- Ensure that DBT implementation is aligned and up-to-date with the most current Hanford projects/activities.
- Document DBT implementation actions and plans, and submit to DOE for approval.

C.4.3.6.6 Performance Assurance

The Contractor shall:

- Develop an integrated Hanford Sitewide Performance Assurance Program Plan (PAPP).
- Ensure the PAPP validates performance of essential SAS protection elements, as approved in the Hanford Site Security Plan, both internal and external to the Contractor, as necessary, dependent on OHC involvement.
- Provide oversight of the SAS critical system elements and management assurance so that risk of hostile events that could affect national security or the health and safety of onsite employees, the public, or environment can be either prevented or mitigated.
- Conduct FOF performance exercises in accordance with approved schedules to validate risk and vulnerability status to support the facility VA and Hanford Site Security Plan revisions.
- Identify, report, and document Facility/Program specific and Hanford Site risk and, if risk is unacceptable, identify mitigating or cost-effective prevention strategies. If mitigation or compensatory measures are not recommended, DOE must accept the corresponding risks. The Contractor shall provide cost estimates for security upgrades associated with mitigation strategies to DOE.

C.4.3.6.7 Surveys, Reviews, and Self-Assessments

The Contractor shall:

- Maintain and coordinate the centralized self-assessment program for the Contractor and OHCs and ensure consistent application across the Site.
- Conduct self-assessments and SAS performance tests of SAS program elements, in accordance with an appropriate schedule, that is coordinated with DOE.
- Develop and manage a centralized Sitewide corrective action management program to monitor, track, and resolve SAS findings, suggestions, and other opportunities for improvement identified in DOE periodic surveys and by other outside sources in the SAS Program.

- Maintain a Contractor and DOE Safeguards and Security Information Management System (SSIMS) node. Coordinate input of information into various SAS tracking databases (including SSIMS). Prepare and enter into SSIMS quarterly corrective action status updates for each Hanford Site contractor with open findings within the required timeframes as identified in DOE directives and in DOE supplemental direction.
- Support DOE SAS inspections and surveys of OHCs.
- Support DOE-HQ and other Government reviews (such as the Government Accountability Office [GAO]).

C.4.3.6.8 Foreign Ownership, Control, or Influence/Facility Clearance and Registration of Activities

The Contractor shall:

- Provide assistance to OHCs regarding facility clearance and foreign ownership, control, or influence (FOCI).
- Coordinate Hanford Site contractor facility clearances regarding security interest/classified activities.
- Provide assistance for the input of facility clearance information into the SSIMS, coordinate completion of the FOCI/Facility Clearance package prior to submittal to DOE, and provide assistance and support to OHCs for other related facility clearance and registration actions.

C.4.3.6.9 Safeguards and Security Training

The Contractor shall:

- Ensure personnel involved with SAS duties are trained to a level of proficiency and competency, so that they are qualified to perform assigned SAS tasks and responsibilities.
- Use and integrate DOE NTC resources and assistance in the development and instructional needs for personnel involved with SAS implementation.
- Obtain and maintain a DOE validated Training Approval Program to ensure training programs conducted by organizations other than the NTC meet established objectives, standards, and criteria.

C.4.3.6.10 Safeguards and Security Awareness

The Contractor shall:

- Administer the Hanford Site Security Awareness Program for Hanford employees, subcontractors, and visitors.
- Coordinate with DOE and OHCs to maintain awareness of Sitewide security issues/topics and incorporate them into the Security Awareness Program, as appropriate.
- Conduct security training for permanently badged employees on an initial and annual frequency to maintain appropriate levels of awareness, and commensurate with their work assignments and access authorization level.
- Provide the security training (initial and refresher) module for adaptation into Hanford General Employee Training (HGET) and ensure annual security refresher training (general or CMPC) is completed on or before the required due date for Hanford Site cleared individuals.

- Ensure proper emphasis is placed on awareness education of the Incidents of Security Concern program requirements, especially the identification, categorization, and timely reporting elements.
- Ensure the SAS Awareness Program includes objectives designed to meet Site specific needs and federal requirements. Employee awareness shall be assessed at least annually to ensure the understanding of the SAS Program continually improves. For purposes of assessing employee awareness, legitimate representative sampling may be used as an acceptable method to assess the progress of the employee population as a whole.
- Develop and provide comprehensive security briefings for personnel who hold an active Hanford Site security clearance, and maintain an SAS intranet website accessible for Hanford Site employees.
- Schedule employees, whose clearance/access authorization is granted by the DOE Richland Operations Office, for comprehensive security awareness orientations within one (1) working day from security clearance/access authorization grant or reinstatement from another federal agency. When access authorization grant/reinstatements occur after 1:00 p.m., scheduling of the briefing must occur no later than close of business the next workday.
- Provide supplementary SAS awareness activities and briefings (for example, at staff and safety meetings across the Hanford Site) in addition to the initial, refresher, and termination briefings upon request of DOE or OHCs.

C.4.3.6.11 Classified Visits

The Contractor shall coordinate and manage the Hanford Sitewide Classified Visits Program and associated processes. Regardless of the Hanford Site contractor performing organization, the Contractor's Classified Visits Program shall function seamlessly.

C.4.3.6.12 Equivalency and Exemption Process

The Contractor shall maintain Hanford Sitewide plans and procedures for identifying, evaluating, and processing equivalency and exemption requests to SAS requirements. Equivalency and exemption requests shall:

- Be thoroughly scrutinized as to their justifications.
- Be applicable and unique to the project/program scopes of work.
- Be cost-effective.
- Ensure appropriate levels of security where necessary.
- Be used judiciously when other viable means to meet requirements would not be in the best interest of the spirit and intent of the DOE SAS program.

C.4.3.6.13 Incidents of Security Concern

The Contractor shall:

- Develop and maintain an Incidents of Security Concern Program Plan.
- Provide Sitewide procedures and processes for timely identification and notification, response, inquiry, reporting, and closure actions for Hanford Site incidents of security concern (includes incidents of security concern by Hanford contractors).
- Maintain appropriate number of Inquiry Officials to meet mission needs.

- Be responsible for investigation of Contractor and OHCs' security incidents involving SNM, security areas, classified information, and prohibited articles.
- Determine root causes for incidents of security concern and initiate/facilitate corrective actions; administer a Security Infraction Program including issuing infraction reports, security incident notices, and management inquiries; maintain an incident database; and trend security violations.
- Prepare a quarterly trend analysis report on Hanford Site related security incidents, and submit to DOE.

C.4.3.6.14 Safeguards and Security Environmental, Safety, Health, and Quality

The Contractor shall:

- Provide SAS Environmental, Safety, Health, and Quality (ESH&Q) management and oversight in support of the SAS program for the Hanford Site program/project activities. This support includes coordinating and monitoring SAS ESH&Q activities, interfacing with physicians and health care consultants, conducting and facilitating SAS incident/accident investigations, documenting reviews and approvals, and preparation of Site and corporate reports.
- Develop and implement SAS programs and initiatives, in accordance with the Integrated Safeguards and Security Management Policy.
- Serve as the liaison to federal, state, and other organizations concerning SAS ESH&Q.

C.4.3.6.15 Safeguards and Security Participatory Activities

The Contractor shall provide technical expertise and services to DOE, collect data, and prepare documents, including participating in SAS DOE quality panels, workshops, and committees, to further advance and improve SAS processes, procedures, policies, and cost efficiencies across the DOE complex.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: None.

Interfaces: MAPR and/or its contractor.

C.4.4 Emergencies and First Responders

C.4.4.1 Fire and Emergency Response Services

The desired outcome is a Fire and Emergency Response Service that prevents or effectively controls/mitigates wildland and structural fires and ensures timely and successful responses to emergency events on the Hanford Site.

Key Customers

- DOE
- OHCs
- WTP

Scope and Requirements

The Contractor shall:

- Provide fire emergency response services, including fire prevention, fire suppression, and fire investigations; emergency rescue; emergency medical service and patient transport; incident command; and hazardous materials and chemical/biological/radiological emergency response (to include decontamination) for the Hanford Site.
- Ensure 24/7 fire and emergency services-related protection of human life, property, and facilities, operate basic and advanced life support emergency medical services.
- Maintain and operate Hanford fire stations. Most of these facilities are occupied 24/7. These facilities are dormitories and require sanitary living conditions on a 24/7 basis. Facility requirements include consistent environmental controls for occupants, equipment and inventory, such as temperature-sensitive medications on the ambulances.
- Report the status of the Fire Services program performance (to include analysis of cost performance) monthly to DOE.
- Submit a summarization report regarding fires and other property damage that was experienced on the Hanford Site for the year.
- Respond to medical emergencies on the Hanford Site with ambulance and trained emergency medical personnel.
- Meet or exceed the response times to alarms and incidents, as specified by the Hanford Fire Needs Assessment, in at least 95 percent of the instances.
- Provide 9-1-1 backup to the Patrol Operations Center.
- Be the primary responder for fires on the Hanford Site, to include wildland fires and radiological contaminated facility fires, and fires in areas where a nuclear criticality incident is possible.
- Document a Fire Protection Program and submit to DOE for approval.
- Update and maintain the Hanford Fire Needs Assessment, and submit to DOE for approval.
- Submit Hanford Site Wildland and Prescribed Fire Plans annually for DOE approval.
- Utilize the Hanford Fire Needs Assessment as a basis for emergency staffing levels to be maintained 24/7, including holidays and weekends.
- Initiate updating pre-incident plans upon contract turnover with no less than 75 percent completed within two (2) years. Within three (3) years, the pre-incident plans shall be updated. Thereafter, pre-incident plans shall be reviewed annually and maintained current.
- Act as the Site Incident Command Agency for fires and hazardous/radiological materials emergencies on the Hanford Site, to address and bring to closure (terminate) emergency situations that could threaten operations, employees, the public, or other interests of the Hanford Site.
- Be the designated rescue agency for the Hanford Site for rescue in confined spaces, hazardous areas, cave-ins, trench rescue, and high angle rescue.

- Respond to emergency situations created by a hazardous material spill, including spills and mixed waste spills, for the purpose of incident command and mitigation of the emergency condition(s).
- Coordinate with OHCs onsite in regards to fire services. Respond to alarm, trouble, or supervisory signals of fire systems. Reach agreement with OHCs on facility fire watch responsibilities following an event or impairment.
- Coordinate with cultural resource program regarding locations of sensitive cultural areas on the Hanford Site.
- Make available elements of the Fire and Emergency Response Services on a non-mission interference basis to other non-Hanford Site entities (e.g., fire departments/districts, school districts and other local/state/federal agencies) in response to requests from surrounding fire departments/districts, schools, under mutual aid and state mobilization agreements.
- Develop a mutual aid agreement with the MAPR (and/or its contractor).
- Provide fire and emergency response to the MAPR (and/or its contractor) consistent with the mutual aid agreement.
- Provide fire and emergency response to Energy Northwest consistent with the DOE contract with Energy Northwest (e.g., confined-space rescue, medical/ambulance services, hazardous materials emergency response, emergency fire response).
- Implement mutual aid and state mobilization, and other agreements, with local Fire Districts and government agencies. The agreements shall be reviewed annually and updated as necessary.
- Provide a Fire Marshal who has delegated Authority Having Jurisdiction (AHJ) for the Hanford Site. The Fire Marshal or his representative shall be the authority for the investigation of cause, origin, or circumstance of fire related accidents, incidents, explosions, and other hazardous conditions and shall maintain the case files on each investigation.
- Participate in the Hanford Fire Protection Forum (HFPPF). The HFPPF, among other duties, documents the duties of the Fire Marshal (i.e., the Fire Marshal's Charter). The Contractor shall be responsible for configuration control, obtaining approval, and distribution of the Fire Marshal's Charter to OHCs.
- Provide a respiratory protection equipment program to include maintenance, testing, repair, modification, and servicing of respiratory protection equipment used by the Hanford Fire Department.
- Participate in and support emergency response training, drills, and exercises by OHCs, as agreed to in MOAs or MOUs.
- Participate in the development of MOUs, U.S. Fish and Wildlife Service (USFWS) Cooperative Fire Protection Agreement, and other Mutual Aid Agreements.

3709 Fire Station Hot Water Boiler

Johnson Controls has a contract with DOE to provide steam and heating for specific facilities identified in the Contract, which includes the 324 facility, along with providing the natural gas used to fuel the boilers. The Johnson Controls contract expires November 14, 2021. Johnson Controls installed a 48.2 hp, 160 psi natural gas fired hot water boiler for heating the 3709A fire station and is responsible for operating and maintaining the hot water boiler. The boiler is installed in the mechanical room of 3709A. Johnson Controls also installed a natural gas distribution system in the 300 Area for boilers.

The Contractor shall assume O&M of the 3709A hot water boiler before October 1, 2020, including developing an agreement (cost, reliability, and amount) for the supply of natural gas with the contractor responsible for providing the natural gas in the 300 Area, and operating and maintaining the natural gas distribution system.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints:

- Fire services are required through the life cycle of the Hanford Site. Resources shall be maintained and, when appropriate, reduced in alignment with Site remediation and closure.
- The medical emergency response program shall be conducted under the Mid-Columbia Emergency Medical Services and Trauma Council, operated under the County Medical Program Director. The ambulance service shall include basic and advanced life support and be licensed through the DOH.
- The emergency response time requirement is assumed to remain constant through the life cycle.
- For emergency situations created by a hazardous material spill, including mixed waste spills:
 - Once the hazards have been mitigated, the owners of the facility or material have the responsibility for cleaning up the material and decontaminating the Site, but may request supplemental expertise from fire services.
- The natural gas system will be transitioned from Johnson Controls to a contractor other than HMESC.
- OHCs are responsible to communicate fire service needs to the Contractor for changes to their facilities or new installations.

Interfaces: Emergency medical response transport when or after making the determination, based on the level of medical emergency, as to patient destination, such as the Occupational Medical Services Contractor, and local hospitals.

C.4.4.2 Emergency Operations

The desired outcome is an Emergency Operations function that ensures timely response to and effective control and mitigation of emergency events on or affecting the Hanford Site. In so doing, the loss of life and personal injury, damage to property, and impact to the environment is minimized.

Key Customers

- DOE
- OHCs
- PNNL
- WTP
- MAPR

Scope and Requirements

The Contractor shall:

- Provide coordination, integration, and maintenance of a centralized Hanford Site EP program capable of recognizing and effectively responding to the spectrum and severity of Hanford Site emergencies potentially affecting onsite and offsite areas, as well as non-Hanford events that could affect onsite

operations or personnel, including personnel safety and security situations and natural phenomenon disasters.

- Plan for and appropriately integrate responders from other agencies and organizations.
- Provide an integrated EP program that can sustain a 24/7 state-of-readiness, with special emphasis on seamless integration of other agencies and organizations providing response services.
- Maintain DOE/RL-94-02, *Hanford Emergency Management Plan*, an integrated All-Hazards Plan, and DOE-0223, *RL Emergency Plan Implementing Procedures*, ensuring consistency with the National Incident Management System and Incident Command System.
- Conduct, coordinate, and support training for key customers and subcontractors on the Hanford Emergency Management Plan. Initial training shall be accomplished within one (1) month of accession.
- Conduct and support initial and refresher training for staff assigned to general purpose, low hazard, and hazardous facility emergency response organizations (FERO), and ~230 EOC volunteers.
- Operate, staff, and maintain the EOC Shift Office with trained duty officers 24/7 to test and facilitate communications with Hanford facilities and with DOE.
- Monitor and support the emergency readiness of Hanford Site facilities.
- Conduct or support emergency management surveillances and assessments.
- Review key customers corrective action plans for completeness and compliance with DOE-0223, *RL Emergency Plan Implementing Procedures*.
- Verify corrective action implementation, and validate the effectiveness of corrective actions. Provide technical expertise and administrative support to DOE approval actions.
- Provide operational, technical and administrative emergency management services, including direct support to DOE.
- Maintain a primary and alternate EOC. EOC functions include the capability to generate a common operating posture, conduct Consequence Assessment, communicate with the DOE (including DOE-HQ), facilities, local and state offsite partners, and disseminate Emergency Public Information.
- Manage the Transportation EP program, maintain program plans and procedures, conduct training and drills, conduct surveillances and assessments, and monitor corrective action implementation.
- Develop and submit to DOE the annual DOE Emergency Readiness Assurance Plan ready to transmit to DOE-HQ.
- Support key customers in the preparation and review of Hazards Surveys and EP Hazards Assessments, including technical assistance to ensure documents contain appropriate content and quality. Provide technical expertise and administrative support to DOE approval actions.
- Develop, populate, and maintain a monthly “dashboard” of appropriate information, including performance metrics, trends, and leading indicators, for the Sitewide emergency management functions of interest to DOE, including, but not limited to, training; exercises; technical basis documents, plans and procedures, evaluations, surveillances, appraisals and assessments; findings and other deficiencies from self-assessments, Site and external assessments; status of corrective actions;

and budget and resources, including the establishment of on-call FERO staff in accordance with requirements at Hanford facilities.

- Manage the Hanford Site Emergency Exercise Program, including drafting the annual EP schedule for future fiscal year. In accordance with the annual exercise schedule published by DOE at the beginning of the fiscal year:
 - Develop, conduct, and evaluate Annual DOE Field and DOE Limited exercises and provide reports to DOE; and
 - Evaluate contractor drills for exercise credit and provide reports to DOE.
- Operate the Hanford Site Emergency Alerting System, and ensure its operability and availability.
- Ensure required emergency communications systems and equipment are operable and available, in coordination with other functions.
- Support offsite interfaces and the emergency public information program.
- Coordinate facility emergency drill programs, drill schedules and participation, and provide expertise on drill conduct and evaluation to Hanford contractors.
- Provide personnel, as requested by key customers, for the support and evaluation of facility drill programs.
- Provide technical/administrative input for the EP Program in the areas of report/presentation preparation, EP report, EP hazards assessment(s), emergency action levels, and budget management.
- Coordinate EP response activities for Hanford Site facilities and establish minimum Site technical support roles and responsibilities to establish a consistent approach.
- Integrate and coordinate the procedures and checklists of first responders and security personnel for those response actions that affect emergency events at Hanford facilities.
- Train key customers Building Wardens, Building Emergency Directors, Incident Commanders (IC), Drill Coordinators, and Controllers/Evaluators to ensure proficient staffing for exercises and emergencies.
- Maintain the Hanford Site and DOE on-call program, Hanford Site Emergency Assignment roster, and contact lists, and perform on-call duties.
- Establish procedures and provide direction and coordination for the Hanford Site Occurrence Reporting Program.
- Maintain the Contractor's Continuity of Operations Plan (COOP), and DOE COOP, as well as integrate with DOE and other contractor COOPs to ensure essential tasks can be continued within the timeframes specified in the plans, with special emphasis on the essential records needed for effective emergency response.
- Support DOE in performing impact analysis of changes to the Site boundary, Site access, and future uses of Site lands, including the MAPR and associated activities, and impact to the Emergency Management Program.

- Prepare and integrate, in coordination with environmental points-of-contact, the parts of the emergency management plan that satisfies the WAC requirement for a contingency plan and inclusion of emergency plans and procedures into the Hazardous Waste Permit.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: DOE will maintain EP MOUs in accordance with DOE/RL-94-02.

Interfaces: MAPR, Oregon Department of Energy, Washington State Military Department, DOH, Washington Department of Agriculture, Energy Northwest, and Benton, Franklin, and Grant counties, to coordinate emergency offsite events/drills/exercises.

C.4.4.3 Radiological Assistance Program

The desired outcome of the RAP is detection, identification and analysis, and response to events involving the use of radiological/nuclear material, ensuring customers needing assistance have the information and support necessary to respond to an accident, incident, or terrorist activity involving radioactive materials where there is a real or potential radiological hazard to workers, the public, or the environment. The states have jurisdictional responsibility for ensuring the public's health and safety when radioactive materials are accessible to members of the public. Offsite surveys or related actions will be under the direction and control of the appropriate state and performed by the Region 8 RAP Team, with support as necessary from the DOE and contractor personnel. Prior to a response, the Regional Response Coordinator (RRC) or designee will coordinate with the appropriate DOE management and contractor representatives to ensure they are informed of the situation.

Key Customer

- DOE

Scope and Requirements

The Contractor shall maintain and implement a first-responder Radiological Assistance Program that includes plans, procedures, resources, and 24/7 response capabilities. Assistance shall be provided to the Hanford Site and to Region 8, other Regions, and possible international mutual aid support, as directed by DOE. The Contractor shall provide radiological assistance to DOE program elements, other federal, state, and local agencies, Tribal Nations⁴, and private groups requesting assistance.

C.4.4.3.1 RAP Contractor Response Coordinator

The Contractor shall:

- Designate and support a RAP Contractor Response Coordinator (CRC) to provide support to DOE in providing management and direction of RAP contractor personnel. The CRC is responsible for assisting in the management and oversight of the RAP, specifically to ensure that work scope and budget is forwarded to the appropriate OHCs to complete operational tasks, ensure 24/7 readiness of resources (personnel and equipment), and support and assist the DOE RRC, as requested.
- Ensure that Region 8 is capable of deploying two (2) RAP teams simultaneously, assembling the second deployable team within four (4) hours of notification.
- Ensure pre-designation of three (3) RAP teams that are available to provide 24/7 response capability.

⁴ The reference to Tribal Nations in this Contract is comprised of the Yakama Nation, Confederated Tribes of the Umatilla Indian Reservation, Nez Perce, Colville, and Wanapum Band.

- Function as a liaison with DOE-HQ, other Regional Coordinating Offices, and their respective CRCs, to coordinate the planning and response to requests for radiological assistance.
- Define the detailed CRC roles and responsibilities in regional plans and procedures, as approved by the DOE RRC.

C.4.4.3.2 Radiological Assistance Program Response Teams

The RAP response teams shall be composed of DOE and OHC personnel with appropriate administrative and technical skills and experience. The Contractor shall ensure that RAP team members are properly qualified, trained and drilled in their roles and responsibilities to safely and effectively respond to radiological incidents.

The Contractor shall properly equip RAP teams with monitoring and personal protective equipment to respond to radiological incidents and ensure the equipment is properly maintained and calibrated, as required by applicable standards.

C.4.4.3.3 General Management and Response

The Contractor shall:

- Maintain a workspace for classified work and classified communications, including classified data processing, storage of classified materials and media team.
- Maintain vehicles, equipment, instrumentation, and supplies (to include up-to-date maintenance of the foregoing and an up-to-date equipment list) in a state of readiness adequate for deployment and transport to the emergency or incident scene.
- Maintain regional management and response plans and procedures. The plans and procedures shall describe the concept of operations, define the roles and responsibilities of personnel, and identify the actions taken to ensure the readiness of personnel and equipment. Plans and procedures shall comply with the RAP Field Operational Guide, and be reviewed and revised annually and submitted to the DOE RRC for comment.
- Provide a detailed status report of RAP cost and performance data on a monthly basis to the DOE RRC and DOE-HQ.
- Establish procedures for and conduct annual self-assessments of the RAP in accordance with applicable laws, regulations and DOE directives. The Contractor shall provide a written report of the self-assessment and corrective actions to DOE-HQ annually.
- Provide DOE-HQ with timely notification and reporting in the event of a radiological response; notify DOE-HQ within 15 minutes of a request for emergency assistance requiring deployment of a RAP team.
- Notify DOE-HQ within 15 minutes of offsite deployment of a RAP team(s).
- Provide a written After Action Report to DOE-HQ after deployment of a RAP team(s) and subsequent termination of a response, detailing the response and follow-up activities.
- Maintain records of each request for assistance.
- Develop a Regional RAP IP that includes RAP goals and deliverables and budget estimates, and transmit the IP to DOE-HQ for input to the budgeting process. The Contractor's input shall include unfunded goals, deliverables, and shortfalls for each fiscal year.

- Participate in meetings and working groups as requested by DOE-HQ, write technical papers and articles to communicate with the response community and the general public, and provide support to the DOE Emergency Response Assets, as requested.
- Conduct annual RAP Crisis Response and Consequence Management training to full-time RAP staff, volunteer federal team members, and volunteer contractor team members.

C.4.4.3.4 Radiological Assistance Program Training and Outreach

The Contractor shall:

- Designate a Training and Outreach Coordinator(s) to conduct extensive interagency coordination, conduct drills and exercises, and develop and conduct training for personnel and offsite responders.
- Assist the RRC in providing RAP management and direction.
- Define the Training and Outreach Coordinator's roles and responsibilities in regional plans and procedures.
- Support emergency planning and exercises with state and local authorities and the Tribal Nations, to the degree practical.

The training and drill requirements shall be identified in plans and procedures and shall be in compliance with applicable orders, laws, and regulations.

C.4.4.3.5 Radiological Assistance Program Maintenance and Equipment Management

The Contractor shall designate a contractor equipment coordinator to maintain RAP equipment in a state of readiness, develop procedures for equipment use, and train RAP personnel and offsite responders in proper equipment use. The radiological survey, search, identification, analysis, communication, and transportation equipment shall follow rigorous operability and calibration expectations in order to provide an effective and reliable 24/7 robust response capability.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: None.

Interfaces: Federal, state, and local agencies, and Tribal Nations, to determine and understand their capabilities and, when required, to facilitate responses to radiological emergencies.

C.4.5 Training and Workforce Readiness

C.4.5.1 Volpentest HAMMER Federal Training Center

The desired outcome is a trained Hanford workforce, including a training center that provides a safe training environment with adequate training space, tools, props, and resources, that is a premier training center for Non-DOE, local, state, regional, and national needs.

Key Customers

- DOE
- OHCs
- PNNL
- Hanford stakeholders (on an as needed basis)

- Third parties through Strategic Partnerships (e.g., DOT, Washington State National Guard, U.S. Department of Homeland Security)

Scope and Requirements

The Contractor shall provide efficient instructor-led courses, blended learning, and a performance-based learning program and shall maintain the HAMMER in a ready-to-serve capacity as the primary training facility for the Hanford Site. The program is to enable accomplishment of the customers' missions in the most cost-effective manner:

- Without injury to the workers or the public;
- While meeting regulatory requirements; and
- Consistent with the principles of QA, and the Voluntary Protection Program (VPP).

In order to provide standardized professional and technical training services, the Contractor is required to recruit and maintain an appropriate cadre of staff and instructors (to include worker-trainers from OHCs), as well as business management and facility and training support operations staff members who are technically proficient in their respective areas of expertise.

The Contractor shall utilize the HAMMER campus to provide training services and shall:

- Demonstrate a culture of continuous improvement in key areas and skills;
- Continually anticipate future needs in both course attendance and curriculum;
- Improve integration, partnering, and support within the Hanford Site to promote problem solving and cost efficiencies;
- Develop and deploy effective strategic planning for the mission in the environment of changing budgets;
- Ensure that HAMMER infrastructure and facilities are operationally safe, secure, and compliant with applicable requirements;
- Collaborate with partners; and
- Operate HAMMER in a cost-efficient and effective manner to provide and facilitate quality training for federal and contractor personnel in support of the DOE's mission.

Training courses are designed to meet professional training needs based on job analysis, skill development, and continuous learning. Course content and material shall remain current and reflect applicable federal laws and regulations and DOE policies and procedures. Effective training shall be developed by using a DOE-recognized systematic approach.

The Contractor shall provide scheduling, training record keeping, and other services as deemed necessary to support HAMMER's mission and integration for Hanford.

Additionally, HAMMER shall be fostered as a national and regional training asset that serves other non-DOE, local, state, regional, and national needs in such areas as disaster recovery, emergency response, transportation, fire protection, law enforcement, and military readiness. Training support for these organizations shall be provided through the Strategic Partnerships and excess capacity program and as coordinated with DOE prior to activities.

C.4.5.1.1 Training Support

The Contractor shall provide the Hanford Site workers, including DOE personnel, PNNL as requested, and other customers as requested, training to maintain a qualified workforce, as required by federal, state, and regulatory requirements, DOE directives, and management directives. Table C-1 identifies the specifically required standardized training to be provided by HAMMER and common safety procedures/processes.

Table C-1. Required Standardized Training and Common Safety Processes*

#	Worker Safety Requirement	Common Process	Standardized Training
1	Asbestos.	N/A	Yes
2	CBDPP as required by 10 CFR 850, <i>Chronic Beryllium Disease Prevention Program</i> , and DOE-0342, <i>Hanford Site Chronic Beryllium Disease Prevention Program (CBDPP)</i> .	Yes	Yes
3	Confined Space Entry as required by 29 CFR 1910.146, <i>Occupational Safety and Health Administration</i> , and DOE-0360, <i>Hanford Site Confined Space Procedure (HSCSP)</i> .	Yes	Yes
4	Electrical Safety as required by NFPA 70 and 70E, 10 CFR 851 Appendix A Section 10, and DOE-0359, <i>Hanford Site Electrical Safety Program (HSESP)</i> .	Yes	Yes
5	Excavation permits as required by 29 CFR 1926.651, <i>Safety and Health Regulations for Construction</i> , with emphasis on existing Hanford Site system for obtaining excavation permits and DOE-0344, <i>Hanford Site Excavating, Trenching and Shoring Procedure (HSETSP)</i> .	Yes	N/A
6	Fall Protection as required by 29 CFR 1910, <i>Occupational Safety and Health Administration</i> ; 29 CFR 1926, <i>Safety and Health Regulations for Construction</i> ; and DOE-0346, <i>Hanford Site Fall Protection Program (HSFPP)</i> .	Yes	Yes
7	HGET, satisfies numerous requirements; see HGET Training Program Description.	Yes	Yes
8	Hazardous Energy Control (lockout/tag out) as required by 29 CFR 1910.147, <i>The Control Of Hazardous Energy (Lockout/Tagout)</i> , and implementing CRD O 422.1, <i>Conduct of Operations in accordance with Section J, Table J-2-8</i> , and DOE-0336, <i>Hanford Site Lockout/Tagout Procedure</i> .	Yes	Yes
9	Hazardous Waste Operations and Emergency Response (HAZWOPER) Training in accordance with 29 CFR 1910.120, <i>Hazardous waste operations and emergency response</i> , facility-wide Resource Conservation and Recovery Act (RCRA) permit, WAC 173-303, DOE-0355, <i>Hanford Standardized HAZWOPER Training Program Description</i> .	Yes	Yes
10	Hoisting and Rigging in accordance with the Hanford Site Hoisting and Rigging Manual (DOE/RL-92-36) and as required by 29 CFR 1910, <i>Occupational Safety and Health Standards</i> , and 1926, <i>Safety and Health Regulations for Construction</i> .	Yes	Yes
11	Radiation Safety as required by 10 CFR 835, <i>Occupational Radiation Protection Program</i> , (e.g., Radiological Worker I and II and Radiological Control Technician training), DOE-0357, <i>Hanford Radiological Worker Training Program. Description</i> , and DOE-0358, <i>Hanford Site Core Radiological Control Technician Qualification</i> .	Yes	Yes

Table C-1. Required Standardized Training and Common Safety Processes*

#	Worker Safety Requirement	Common Process	Standardized Training
12	Respiratory Protection Program as required by 29 CFR 1910.134, <i>Respiratory Protection</i> , ANSI Z88.2, <i>Practices for Respiratory Protection</i> , and DOE-0352, <i>Hanford Site Respiratory Protection Program (HSRPP)</i> .	Yes	Yes
13	Stop Work Authority as required by DOE-0343, <i>Hanford Site Stop Work Procedure</i> .	Yes	N/A
* The Contractor shall ensure changes to the required standardized training and common safety processes in Table C-1 are approved by DOE and are communicated in a timely manner to maintain a current listing.			
ANSI = American National Standards Institute CRD = Contractor Requirements Document HAZWOPER = Hazardous Waste Operations and Emergency Response			

C.4.5.1.2 Standardized Site Training

The Contractor shall:

- Develop and maintain training related to the common procedures/processes directly applicable to work at Hanford Site, Site hazards, and use qualified instructors and established universally applicable curricula objectives.
- Integrate relevant DOE directives and Hanford Site specific safety training changes into HGET module within 60 days of identification of these activities.
- Provide for worker involvement, including worker-trainers, where appropriate.
- Coordinate with OHCs to establish training priorities and develop standardized training programs where applicable, in addition to the standardized training.
- Ensure changes to the required standardized training and common safety process in Table C-1 are approved by DOE and are communicated in a timely manner to maintain a current listing.
- Perform mask fit services for OHCs (~4,200 employees).

C.4.5.1.3 Training Other than Standardized

The Contractor shall:

- Execute the necessary quality controls (QC) and oversight to ensure that customer requirements are fully incorporated.
- Provide a cost-effective program for non-facility specific training that meets regulatory requirements and promotes QA, and VPP principles.
- Benchmark Hanford Sitewide standardized performance-based safety training curriculum and submit to DOE. If not provided by the private sector, the costs shall be benchmarked with comparable federal training institutions to demonstrate cost-effectiveness.
- Provide support to the Hanford Site in acquiring technically competent and cost-effective training services for special needs and peak load periods, through the brokered use of internal and external resources.
- Prepare an Annual Training Needs Forecast and Plan that meets Hanford Site needs; submit to DOE as part of the Program Review, and report progress and performance against the Plan quarterly.

- Conduct a top-to-bottom review of the Hanford training programs, including an assessment of the program quality, potential improvements, and possible efficiencies, and submit analysis to DOE. As part of this review, the Contractor shall work with OHCs to identify additional training that should be standardized, and develop identified training into a deliverable course.

C.4.5.1.4 Learning Management System, Courseware Management System, and Training Support Tools

The Contractor shall:

- Develop course material, training products, and training plans necessary to accomplish the HAMMER training. The Courseware Management System and Learning Management System shall be leveraged to their fullest capabilities.
- Provide administration of the HAMMER Courseware Management System, and provide system-troubleshooting assistance to users, generate reports and supply to end-users, assistance to field developers, assistance in publication of new or revised courses, and maintenance of web-based training database.
- Manage and maintain integrated training information systems (e.g., Learning Management System, Courseware Management System, Hanford Site Worker Eligibility Tool, and Hanford Integrated Training System).
- Provide for the use of radioactive source materials and ionizing radiation producing machines as training devices for specific specialized classes.
- Coordinate with OHCs and DOE to assess upcoming training needs and incorporate these needs into baseline planning activities.
- Coordinate with other training providers within the DOE complex to identify specialized training to supplement HAMMER provided training.

C.4.5.1.5 HAMMER Management Assurance

The Contractor shall:

- Provide a full range of business, management, and quality functions.
- Develop and implement a system that provides for continuous assessment, evaluation, and improvement of HAMMER activities consistent with contract requirements.

The system shall include processes, procedures, and performance measures used by the Contractor to:

- Measure and improve performance;
- Ensure that mission objectives and contract requirements are met;
- Ensure that workers, the public, and the environment are protected;
- Ensure that operations, facilities, and business systems are efficiently and effectively protected and maintained; and
- Identify and correct deficiencies.

C.4.5.1.6 Training Records

The Contractor shall:

- Maintain and manage training records (HAMMER and other Hanford Site training records), provide a training records system for entry, retrieval, and safeguarding of training records.
- Maintain record copy training program files consistent with the Sitewide records retention requirements and policies, to include needs analyses, course design and development documents, lesson plans, student handouts, and exams.
- Ensure training policies, plans, procedures, and program descriptions are integrated, implemented, and maintained, consistent with regulations and directives.

C.4.5.1.7 Performance Measures

The Contractor shall:

- Develop a set of performance measures and associated metrics that provides a timely and accurate assessment of HAMMER training and operations.
- Provide to DOE, on a quarterly basis, DOE statistical information on student numbers and facility usage on a quarterly basis.
- Track the number of student days of training provided against the previous five (5) years, including Hanford training and offsite customers, and report as part of the Program Review.
- Develop and submit to DOE a three (3) year rolling HAMMER Strategic Plan that addresses HAMMER strategic goals, critical assumptions, and guiding principles. The plan shall focus on the Hanford scope.
- Conduct a routine Program Review addressing work scope, budget, program status, facility usage, student numbers, and management challenges and issues.
- Track and report non-Hanford revenues. Under the DOE Strategic Partnerships Program, HAMMER may rent the facility and props to other non-DOE federal agencies, state and local governments, tribes, industry, and not-for-profit organizations on a full cost recovery basis, or as directed by DOE. Reimbursements are shown as revenue (credit) against the HAMMER base program.
- Submit on a routine basis, a schedule of upcoming activities and training to DOE.

C.4.5.1.8 Training Evaluation Program

The Contractor shall:

- Oversee and evaluate training products to identify and act on improvement opportunities to ensure optimum training effectiveness.
- Utilize student and instructor evaluations and information received to incorporate lessons learned and work with instructors, who provide training to the Hanford Site, to improve identified deficiencies.
- Evaluate the effectiveness of training in achieving the transfer of knowledge and skills to the target audience. The training evaluation program shall include, at a minimum:
 - Conducting training and process evaluations;

- Providing periodic statistical evaluation reports as part of their self-assessment program; and
- Utilizing evaluation results to continuously improve course content.

C.4.5.1.9 HAMMER Facility Management and Operations

The Contractor shall provide cost-efficient and effective management, maintenance and oversight of facilities, Site safety, and logistical support required to support operations at the HAMMER. This work shall be conducted in accordance with applicable requirements and approved processes and procedures.

C.4.5.1.10 HAMMER Site Operations

The Contractor shall:

- Manage and maintain HAMMER facilities in a safe, secure, efficient, and fully operational condition.
- Ensure requirements to include environmental and operational permits are fully implemented and documentation is maintained. This shall be accomplished by assessing facilities and infrastructure as to their operating condition and identifying maintenance requirements.

C.4.5.1.11 HAMMER Site Development Plan

The Contractor shall develop and maintain a Site Development Plan for the HAMMER campus. The plan shall include, but is not limited to:

- Facility renovations;
- Maintenance;
- New construction; and
- Description of related resources requirements and needs.

The plan shall address, at a minimum, equipment and systems throughout HAMMER, such as:

- Fire detection and suppression systems;
- Utility systems;
- Heating, ventilation, and cooling systems;
- Water distribution systems;
- Liquid petroleum gas system; and
- IT infrastructure.

C.4.5.1.12 HAMMER Facilities and Equipment Maintenance

The Contractor shall:

- Manage the HAMMER maintenance activities, including equipment and facilities.
- Ensure equipment is maintained in accordance with operational manuals or accepted standards.
- Plan, coordinate, and schedule HAMMER classrooms, props, and equipment for courses, exercise, and events.
- Provide for operation of the HAMMER facilities, including engineering, prop and classroom setup, prop operations, training support, occurrence notification and reporting, material and equipment procurement, inventory control, customer requirements coordination, emergency operations and security support.

- Implement and maintain a plan for a comprehensive maintenance operation that addresses preventive, corrective, and predictive maintenance actions for HAMMER facilities and infrastructure.
- Ensure specialized training facilities, training aids, and equipment are maintained.
- Maintain a system that identifies the current operating state of facilities and infrastructure. The system should also project the end-of-life cycle for elements and components of facility and infrastructure systems.
- Develop and maintain a HAMMER Facility Master Plan with prioritized needs and proposed improvements necessary to address life cycle and proposed facility upgrades. The Plan shall:
 - Discuss the continued evolution of the HAMMER physical facilities and prop upgrades;
 - Take into consideration the Hanford Site workforce forecast, and training forecasts for Hanford Site training and offsite training (i.e., excess capacity); and
 - Be integrated with the Site Development Plan based on the HAMMER Strategic Plan.

C.4.5.1.13 HAMMER Risk Assessment Program

The Contractor shall:

- Maintain a documented risk assessment program for HAMMER training operations with an emphasis on high-risk activities.
- Utilize a graded approach to conduct risk assessments of training, qualification, evaluation activities, and shall integrate with OHCs. The Contractor is responsible for determining risk levels, identifying potential hazards, and recommending controls to be implemented.
- Ensure training operations, with emphasis on training activities conducted at HAMMER, meet the highest standards of safety performance.

C.4.5.1.14 HAMMER Strategic Partnerships Projects

The Contractor shall:

- Provide specialized training support services for other federal agencies aligned with the expectations in current DOE directives relating to Strategic Partnership Projects (SPP), formerly known as Work for Others (WFO [Non-DOE Funded Work]), and on a full cost recovery.
- Maintain ongoing commitments to the following customers consistent with fiscal year funding: DOT, National Guard, and Department of State.

C.4.5.1.15 HAMMER Excess Capacity

The Contractor shall:

- Provide specialized training support services and excess capacity for non-Hanford training, but within the DOE enterprise, on a full cost recovery basis.
- Maintain ongoing commitments with DOE Office of Electricity Delivery and Energy Reliability, and PNNL consistent with fiscal year funding.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints:

- Props and rooms constructed/funded by a specific customer shall be utilized according to the terms of agreement with that customer (for example, the classrooms constructed for and funded by the U.S. Department of State shall be provided to the U.S. Department of State as first priority).
- The HAMMER facility (not including the PTA) shall be maintained as a public access (unbadged) area. Controls shall be in place for guest registration, but a security badge is not required. Foreign visitors shall be allowed access to the facility, and appropriate documentation shall be maintained on these visits.
- Radioactive source materials and ionizing radiation-producing machines used as training devices for specific customer-sponsored classes are provided by an inter-contractor MOA with the customer contractor.
- DOE and its contractors shall be given priority access to training facilities, with excess capacity available to use by non-Hanford, offsite customers.
- Some required training (e.g., Asbestos Supervisor and Worker Training), shall be delivered using State of Washington approved curriculum, with Hanford instructors certified by the state.

Interfaces: Local, state, regional governments; Tribal Nations; military, and federal emergency response agencies; DOE offices (DOE-HQ, National Nuclear Security Administration, PNNL); Hanford and national union leadership; and local community leadership (including the Tri-City Industrial Development Council) for continued training support.

C.4.6 Information Technology and Management

C.4.6.1 Information Technology Core Services

C.4.6.1.1 Strategic Planning, Governance, Enterprise Architecture, and Program Management

The desired outcome is to support DOE in implementing laws, regulations, and polices, and to facilitate evolving information technology (IT) practices. Below are examples of work that shall be performed under this task (this list should be considered examples and is not all-inclusive):

- Developing a charter to establish an IT Governance Board;
- IT Governance Process Development and Management;
- Capital Planning Investment Control (CPIC) Support;
- Independent Verification and Validation;
- Agency IT Architecture Support;
- IT Portfolio Analysis;
- Risk Management;
- Program Analyses and Implementation (including Business Cases Analysis, Cost/Benefit Analysis and Cost Effectiveness Analyses);
- IT Organizational Development;

- Program Management Office Support;
- Advisory and Assistance Services;
- Federal Enterprise Architecture Alignment Support Services; and
- Market Research.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall develop a charter to establish an IT Governance Advisory Board composed of key Contractor and federal senior IT managers and stakeholders, subject to approval by the CO.

The Governance Advisory Board will provide policy guidance, advice, and assistance in the definition, design, and implementation for the IT Program. In addition, it serves as the core group, providing advocacy for IT services and infrastructure business and technology across the Hanford Site.

The governance function shall work to foster full integration between the Hanford Enterprise Architecture and Capital Planning and Investment Control processes, including strategic planning, investment management, and portfolio management. The Governance entity serves as the focal point for the development and coordination of Hanford Sitewide policy and guidance, including standards and best practices for IT services and infrastructure. This team is responsible for establishing common terminology definitions and frameworks, including policies, standards, processes, and procedures. Unless otherwise noted or directed, it should be assumed that IT deliverables from the Contractor (such as architectures, plans, and programs) should be mature and actionable packages that are subject to review by the Governance Advisory Board and final approval by DOE.

Boundaries, Constraints, and Interfaces: None.

C.4.6.1.2 Information Technology Capital Planning

The desired outcome of the CPIC process is to have effectively managed IT programs and projects.

Key Customers

- DOE
- OHCs

Scope and Requirements

Capital Planning support personnel shall have a good working knowledge of Office of Management and Budget (OMB) requirements and best practices for IT Investment Reporting, Application Portfolio Management, Governance (specifying the decision rights and accountability framework to encourage desirable behavior in the use of IT), and Project Management.

The Contractor shall perform the following tasks associated with IT Capital Planning:

- Support the management of information, IT assets and IT investments, including OMB CPIC Exhibit investments and reports. These reports are required monthly, annually, and/or during OMB Passback, and this task involves analyzing, collating, and reporting detailed information on the utilization of IT resources (e.g., applications, hardware, software, and labor).

- Coordinate with DOE to facilitate the timely and accurate submission of applicable CPIC Exhibits for IT investments in OMB A-11 for monthly and annual reports and data calls.
- Provide analysis and reporting of cost and risk reduction activities (including creating and maintaining guidance) to improve investment performance for the Hanford Site's Exhibits and IT project management activities.
- Facilitate for investment owners, the measurement of investment performance by providing annual and periodic guidance, which adheres to OMB, DOE, and EM requirements and best practices.
- Coordinate with DOE to facilitate the timely and accurate submission of monthly IT Dashboard submissions for the major investments.
- Provide routine updates to DOE to support the EM Application Registry.
- Provide IT portfolio management support by evaluating and monitoring the portfolio on a continuous basis (and by developing a portfolio management process to support IT Governance and producing portfolio reports).
- Support ad hoc portfolio requests in the electronic (eCPIC) system for portfolio analysis.
- Support the gathering and reporting for data calls in a timely and accurate manner, within the due date specified by the requesting organization.
- Understand DOE's and EM's IT governance processes in order to facilitate the use of IT governance and its integration with the CPIC process.
- Maintain IT governance documents.
- Provide support for meetings, including providing support for presentations, information gathering, and meeting minutes.
- Support reporting requests in a timely and accurate manner.
- Support the Application Portfolio Management process by evaluating the portfolio to increase its efficiency and effectiveness to support stakeholder needs.
- Maintain/create guidance documents for CPIC processes (including for cost and risk reduction).
- Provide a weekly report of accomplishments, activities, issues, and recommendations.
- Support TechStat or PortfolioStat audits as they occur.
- Identify and align existing and new IT investments (systems and software) to CPIC exhibits.

Boundaries, Constraints, and Interfaces: None.

C.4.6.1.3 Information Technology Strategic Planning and Architecture

The desired outcome of the strategic and architecture scope will provide a common framework for understanding the integration of information management programs and business processes to manage the evolution of information management.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall provide insight into the utilization of IT resources based on business, mission and technology requirements as well as the plans that outline the path to move from the current environment to a future state. IT Strategic Planning and Architecture support personnel shall have a good working knowledge of OMB requirements and best practices for Governance and Enterprise Architecture.

The Contractor shall perform the following tasks associated with IT Strategic Planning and Architecture:

- Develop an Enterprise Architecture management program plan that integrates and aligns requirements between the Hanford Site and DOE's (including Field Office and HQ) IT management processes (such as cyber, records management, operations, enterprise architecture, and capital planning).
- Establish and maintain the Hanford Site's Enterprise Architecture and associated repositories to document enterprise architecture requirements.
- Create, document, and maintain a Hanford Site target architecture. The target architecture will capture DOE's future states for areas such as strategy, business, data, application, and technology. The target architecture will also include consideration for the shrinking footprint of the mission and consolidation or reduction of the IT footprint on Site.
- Provide support for DOE's IT Governance activities by creating, analyzing, and maintaining enterprise governance documentation, preparing reports summarizing IT projects performance metrics and information, socializing governance practices, and supporting governance meetings.
- Develop presentation information for field Site collaboration initiatives/efforts/meetings in a timely, accurate, and useful manner.
- Support the development/maintenance of the Hanford Site IT Strategic Planning process.
- Support the development, socialization, and implementation of the Hanford Site's IT Strategic Plan.
- Analyze and support system integration and interoperability initiatives by developing transition plans.
- Model system integration and interoperability transition plans in the Enterprise Architecture Repository.
- Provide analysis and support for Enterprise Architecture Cloud Computing initiatives.
- Provide analysis and support for Enterprise Architecture Identity, Credential, and Access Management initiatives.
- Support the gathering and reporting of Enterprise Architecture/Strategic Planning data calls from OMB, EM, or Office of the Chief Information Officer (OCIO) in a timely and accurate manner, within the due date specified by the requesting organization.
- Support ad hoc reporting requests.
- Provide a report of accomplishments, activities, issues, and recommendations monthly, or as requested by DOE.

- Develop the methodology to create a Comprehensive Data Management Plan and deliver the Plan to DOE for approval.
- Conduct a robust Business Impact Analysis (BIA) in order to assess and prioritize business functions and processes (not restricted to Information Management), identify potential disruptions, legal and regulatory requirements, estimate maximum allowable downtime and acceptable losses, and estimate recovery time objectives to give managers strategic business insight that can inform decisions about each major programs assessed through the BIA.
- Develop a COOP and/or Disaster Recovery Plan based on the BIA.
- Be responsible for developing, testing, and reviewing disaster recovery and COOP. The Plan shall be tested annually, and a report of the annual test of the COOP shall be submitted to DOE annually.
- Develop and electronically publish, publicly consumable IT program performance metrics comparable to the externally accessible performance metrics available from other agencies (development of metrics is subject to review and concurrence by DOE) for the purposes of transparency.

C.4.6.1.3.1 Site Standards

The Contractor shall establish, maintain, and publish Sitewide IT standards and policies, subject to the Governance Advisory Board and CO approval, for areas including, but not limited to:

- Hardware;
- Software systems;
- Software development;
- Records; and
- Cyber security.

Boundaries, Constraints, and Interfaces: None.

C.4.6.1.4 Business Management Systems

The desired outcome of the Business Management System (BMS) is a collection of various enterprise IT investments that provide core business functions such as Enterprise Resource Planning, Business Intelligence, and other related functions. BMS is one of the DOE's Agency's Exhibit 300: Business Case for a Major Investment documents, with routine reporting through the CPIC process.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall provide the BMS platform, functions, and services to OHCs. Additionally, the Contractor shall utilize the BMS as appropriate.

C.4.6.1.5 Website Support Services

The Contractor shall:

- Coordinate Hanford Site intranet and internet support, to provide website configuration control, use metrics, and hosting standards.

- Develop a plan to migrate one or more aspects of the external web presence (hanford.gov) to the energy.gov Drupal framework. Upon DOE approval, implement the Migration Plan.

C.4.6.1.6 Geospatial Information Systems

The desired outcome of Geospatial Information System Management is to increase efficiency by integrating the Geographic Information System (GIS) with land planning, cleanup, environmental data management, and post-cleanup S&M business functions.

Key Customers

- DOE
- OHCs
- Natural Resource Trustee Council (NRTC)
- Tribal Nations
- Public

Scope and Requirements

The Contractor shall develop and implement a comprehensive Hanford Geospatial Information Program Plan that defines a five (5) year plan for maintenance and improvements to the existing GIS. The plan will describe the data, tools, software, business processes, personnel, and projected funding requirements needed to support the Hanford Site missions.

The Contractor shall:

- Act as a central geospatial clearinghouse to coordinate, capture, manage and share geospatial information for the DOE and OHCs.
- Develop and maintain a five (5) year GIS Program Plan and budget, and update annually.
- Collaborate with environmental restoration contractors and other stakeholders to develop the Stewardship Information Portal as an enterprise system that provides access to information about the history, cleanup, and as-left condition of the land to support post-cleanup S&M, ongoing regulatory permitting and compliance activities, and delisting of the Hanford Site from the National Priorities List.
- Provide integration, coordination, and acquisition support for high-resolution aerial imagery.
- Provide, at least biennially, one set of 12 inch and 3 inch resolution aerial imagery and light detection and ranging for the site.
- Coordinate with OHCs to ensure their geospatial data/information is available in an agreed upon format and address geospatial concerns.
- Make Hanford Site geospatial information available to DOE, OHCs, and the public.
- Support the integration of the data systems with the Stewardship Information Portal.
- Maintain the Section J Attachments entitled, *Hanford Structure Responsibility Assignment Matrix* and *Hanford Waste Site Responsibility Assignment Matrix*, serving as Administrator of the data and responsible for Sitewide reporting. The Contractor shall be responsible for managing the list in coordination with OHCs. Proposed changes in assignment of facilities shall be approved by DOE.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: None.

Interfaces: Federal and state Governments, Tribal Nations, local agencies or officials, MAPR, and the public.

C.4.6.1.7 Software Engineering and Development

The outcome for software engineering and development scope is to ensure any custom development needs result in secure, high-quality software.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall:

- Establish a Software Development Life Cycle (SDLC) Program, subject to approval by the CO that represents contemporary industry standards, such as requirements tracking, agile development methodologies, automated testing, continuous deployment and integration. The SDLC should tie into the overall governance and investment program and include estimated full life cycle costs, to include periodic security updates and end-of-life activities.
- Develop specialized software to meet the Hanford Site mission needs as requested by DOE, in accordance with the established governance processes.
- Release Government-funded software as open-source.

Boundaries, Constraints, and Interfaces: None.

C.4.6.2 Cyber Security

The desired outcome is a cyber security system at the Hanford Site that ensures no degradations of performance and no disruptions or compromises, including impacts to users, by ensuring the confidentiality, integrity, and availability of cyber security components and information.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Cyber Security Program scope includes, but is not limited to, Classified Cyber Security, Unclassified Cyber Security, and Telecommunications Security.

The Contractor shall:

- Provide a centralized Cyber Security Program, integrated with the other sections of this Contract (e.g., Sections C, H, J), for the Hanford Site.
- Develop, document, and implement a risk-based cyber security program.

- Collaborate with OHCs to ensure compliance with DOE requirements are maintained and implemented consistent with the overall Cyber Security Program.
- Notify DOE Cyber Security Officials within 15 minutes of discovery of violations of the acceptable use policy on government owned systems. This includes providing a detailed, unredacted, and current accounting of the incident or violation(s) to DOE Cyber Security Officials upon request.
- Collaborate and exchange information with the counterintelligence office as well as the iJC3 to facilitate a cooperative risk picture, including but not limited to cyber events and supply chain threats.

C.4.6.2.1 Classified Cyber Security

The Contractor shall:

- Appoint a classified Information Systems Security Manager (ISSM) and subordinate Classified Information Systems Security Officer (ISSO) to conduct the classified cyber security program for the Hanford Site.
- Identify computers used by OHCs, and their subcontractors, that process classified information and implement a Hanford Sitewide program, including administrative procedures and hardware/software security measures, to ensure that classified computers used to process classified information can protect that information against loss, improper use, compromise, or unauthorized alteration or modification, of classified information as required by DOE directives.
- Implement hardware operational changes within six (6) months or earlier of formal DOE classified hardware specifications changes.
- Maintain approved Classified Information Systems Security Plans (SSP) for each classified information system with record copies held by classified ISSOs.
- Implement a classified computer security training program and ensure that training is completed for users of classified computer systems.
- Coordinate with the DOE Authorizing Official's Designated Representative as required to facilitate classified computer systems security issues and incident reporting.
- Ensure that not more than one (1) percent of detected cyber security incidents are caused by improperly configured access controls or physical security failures.
- Provide DOE with a monthly Cyber Incident Report that includes both classified and unclassified security incidents, within 14 calendar days following the end of each month.
- Provide DOE with a National Security System (NSS) quarterly status report within 15 days after the end of the quarter. The report shall be submitted using email to the NSS Program Manager.

C.4.6.2.2 Unclassified Cyber Security

The Contractor shall:

- Appoint an unclassified ISSM and subordinate unclassified ISSOs to conduct the unclassified cyber security program for the Hanford Site.
- Implement a centralized Hanford unclassified computer security program establishing the Hanford policies and practices for Government-owned unclassified cyber resources. This Program is subject to

review by the Governance Advisory Board and approval by the CO. Program elements will be documented in a Hanford Information SSP.

- Have formal procedures addressing each control family.
- Ensure that, at any given point in time, at least 99 percent of the computer system security configuration settings are set to authorized values.
- Maintain current risk assessment documentation associated with every system used by the Contractor. The Contractor shall enter self-assessments into the Risk Assessment Management System, a secure internet application maintained by EM.
- Provide DOE a National Institute for Standards and Technology Special Publication 800-26 self-assessment on an annual basis.

C.4.6.2.3 Telecommunications

The Contractor shall integrate the Communications Security (COMSEC), Protected Distribution System, and TEMPEST/Transmission Security programs of Telecommunications Security for OHCs, and shall generate or approve policies and procedures implementing these programs for the Hanford Site based on provisions of applicable DOE requirements, including the following:

- Nominate a COMSEC control officer, COMSEC custodian and alternates, TEMPEST/Transmission Security coordinator, and operate the Secure Communications Center in accordance with Contractor-approved standard operating procedures.
- Oversee the use of cryptographic equipment; ensure adequate protection of keying material; maintain appropriate accountability of COMSEC material; and install and operate appropriate communications hardware/software to provide protection to Hanford Site cyber systems.
- Conduct a Transmitter Review (for transmitting devices near classified information systems) on an annual basis.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: Systems used by several DOE Hanford contractors and PNNL are operated independently of the HLAN, but maintain connections to the HLAN. The Contractor shall treat independent area networks (e.g., PNNL, WTP) as “untrusted” entities for purposes of firewall configuration.

Interfaces: None.

C.4.6.3 Information Technology Infrastructure

The outcome of IT infrastructure is a robust, secure, and well managed set of integrated IT and telecommunications systems and services.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall provide reliable and secure computing, telecommunications, and network services for the Hanford Site. The Contractor’s systems shall be compatible with the systems utilized by DOE.

As outlined in the Strategic Planning sections, the Contractor shall develop and continue to support the development and implementation of a comprehensive future vision/end-state for communication and IT infrastructure optimization and consolidation plan(s) consistent with mission activities on the Site.

The Contractor shall operate the Hanford Site networks and provide design authority (DA) and configuration control for the network environments, as well as project management, evaluation, design, system integration, consulting, implementation, and support to the core services.

C.4.6.3.1 Network Administration

The Contractor shall:

- Provide network administration services, including systems engineering support for production, test, and development of distributed system environments, as well as maintenance and administrative support for distributed platform operating systems, supporting subsystems, and commercial off-the-shelf infrastructure support software utilities. Network administration provides systems management functions, including management of the availability, capacity, and configuration of distributed computing resources and support and maintain existing shared and dedicated file server resources, to include specification of systems required to meet customer application customer requirements.
- Perform activities required to support the daily operations of the data centers, copper, fiber, and wireless networks, technical systems support, resource management, fileserver data backup, and recovery processes.

C.4.6.3.2 Engineering and Configuration

The Contractor shall provide test, evaluation, and configuration services for infrastructure, new technology, and desktop hardware and software components, including standard and non-standard hardware and software.

C.4.6.3.3 Network Operations Center

The Hanford Network Operations & Security Center (NOC) serves as the focal point for managing network and server problems detected by automated tools or reported by customers. The NOC monitors distributed and centralized production platforms and site applications. The NOC is the point-of-contact for notification of inbound and outbound service interruption.

The Contractor shall provide the following NOC services:

- Network and systems monitoring;
- Sitewide support;
- After-hours customer support;
- Tier 1 cyber event monitoring, notification, and escalation;
- Technical support personnel to track problem events, provide level-one troubleshooting for network alerts, and escalate situations to appropriate parties, as necessary;
- Monitoring platforms for availability on the network, as well as the functionality of critical Sitewide application services, to include monitoring of workload and event management functions of Hanford Site applications; and

- Problem event notification and service coordination as required for radio, pager, radio fire alarm reporter, Emergency 9-1-1 Service for Hanford Patrol, audio/visual teleconference facilities, and the EOC/EOC Shift Office.

The NOC may be called upon to provide after-hours end-user help desk functions. The help desk functions shall include:

- User network logon assistance, to include password resets, assistance with remote access, and other issues pertaining to gaining access to network resources;
- User problem logging and ticket generation;
- Service request logging and ticket generation; and
- Appropriate escalation of user problems.

C.4.6.3.4 Network Management and Maintenance

The Contractor shall:

- Provide project planning, management, and implementation services for IT infrastructure investment projects. Selection of investment projects shall be based on knowledge of the IT infrastructure, requirements of the Hanford user community, and the Contractor's ability to meet customer performance commitments, subject to review by the Governance Advisory Board and concurrence by DOE.
- Provide network engineering, analysis, planning, consulting, integration, and support to ensure maximum availability of network infrastructure and resources, including on-call network engineering support during off hours.

The Contractor shall perform the following services:

- System Design Authority (DA) for administering standards support and jurisdictional controls;
- Engineering support for existing network infrastructure system changes required to ensure optimum performance;
- Quality acceptance and Quality Control (QC)/inspection of existing configurations;
- Systems integration;
- Configuration management (CM) and planning;
- Network configuration control and documentation;
- Network architecture and design;
- Internet protocol name/address mapping and supporting systems;
- Management of network facilities, including heating, ventilation, cooling, and power;
- Administration and technical support for network systems, including the internet connection, bridges, routers, concentrators, switches, and gateways;
- Evaluating monthly and reporting quarterly on the service levels provided to its customers;

- Providing maintenance for the network infrastructure, which includes Hanford Site transmission systems, inside-building cabling systems, bridges, routers, gateways, concentrators, file servers, and switches; and
- Providing for the capability to monitor network services for faults and service interruptions of the backbone switches and devices directly connected to the switches.

C.4.6.3.5 Industrial Control Systems/Supervisory Control and Data Acquisition

Infrastructure Systems the Contractor brings to the Hanford Site shall be compatible with the systems utilized by DOE.

For Industrial Control System (ICS)/Supervisory Control and Data Acquisition (SCADA) systems the Contractor shall:

- Comprehensively identify its ICS/SCADA and feed this information into the BIA process conducted by DOE or DOE integration agents.
- Extend and integrate IT practices, programs, procedures, and requirements (engineering, CM, governance, architecture, and cyber security) to its ICS/SCADA.

Boundaries, Constraints, and Interfaces: None.

C.4.6.4 End-User Computing Services

The desired outcome is a well-managed end-user computing environment comparable to modern and efficient commercial organizations.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall provide and support the Hanford Site standard approved end-user infrastructure environment that includes:

- Desktop computing hardware devices and associated Operating System (OS) software;
- Laptop/notebook/tablet computing hardware devices and associated OS software;
- Thin or zero client computing hardware devices;
- Mobile computing hardware devices and associated OS software (e.g., smartphones, personal data assistants, hand-held devices);
- Business productivity software and client computing applications that are part of the standard approved computing device image(s);
- Locally-attached peripheral devices (exclusive of consumables);
- Video teleconference (VTC) systems;
- Network-attached printers, scanners, multi-functional devices (printer/scanner/fax), and copiers that are attached to the local area network;

- Maintaining the Hanford Site standard for computing hardware, with consideration for the Federal Category Management mandates for IT acquisition;
- Providing administration for user accounts;
- Providing mobile device management for Government issued devices as well as the Site's secure Bring-Your-Own-Device program;
- Providing email administration and support, including wireless email. At a minimum, services shall include adding/modifying/deleting email accounts, updating email directories, and troubleshooting. Email services will include support for encrypted email (currently Entrust), compatible with systems used throughout DOE; and
- Developing and implementing plans, subject to the Governance Advisory Board and concurrence by DOE, to migrate from on premise to commodity (federal or commercial) hosted services for email, hosted desktop, collaboration, and VTC.

C.4.6.4.1 Software Distribution and License Management

The Contractor shall:

- Provide and manage licenses for software (licensed under DOE), including the support of the software distribution and metering service, and maintenance of a list of current software licenses, license agreements, and vendor information (VI) as record material. Contractor-provided licenses shall be the same type as currently provided, unless otherwise mutually agreed upon (e.g., perpetual, subscription).
- Provide distribution and deployment for additional software applications through user pull technology and system push technology, such as Microsoft Adobe Writer[®] or Microsoft Project[®].
- Maintain, as a component of the enterprise architecture, lists of current supported software, including network infrastructure and servers.

C.4.6.4.2 Hardware Maintenance

The Contractor shall:

- Provide repair and maintenance services for end-user computing devices and related peripherals, (e.g., monitors, printers).
- Maintain appropriate relationships with standard product vendors, such that labor and materials costs for in-warranty repairs are recovered to the extent practicable.
- Provide materials (parts) for out-of-warranty items on a non-standard basis.
- Maintain, as a component of the enterprise architecture, lists of current supported hardware, including network infrastructure and servers.

C.4.6.4.3 Workstation Acquisition, Redeployment, and Retirement

The Contractor shall:

- Provide the following redeployment, acquisition, and retirement services for computer systems and related equipment:

- Accept, catalog, store, and redeploy underutilized equipment that meets minimum Hanford Site standards.
- Accept and retire equipment that does not meet minimum Hanford Site standards. The retirement process includes data removal and excess of equipment through established procedures.
- Provide publicly accessible transparency reports on the disposition of Government assets.
- With consideration for the federal Category Management mandates for IT acquisition, assist users with procurements of desktop computer systems and related equipment, and review procurement requests for compliance with the established standards.
- Provide computer delivery and set-up. Maintain an average install completion time for delivery and setup of a computer within five (5) business days from time of receipt of request, with no installs/setups taking longer than eight (8) business days, except under exigent circumstances. An installation shall be considered complete when it is operational in the user's location.

This work scope excludes equipment and activities reasonably managed by the end-user. Examples include, but are not limited to, connecting and disconnecting peripherals and phones, and reorganizing the layout of end-user computing equipment within the workspace.

Boundaries, Constraints, and Interfaces: None.

C.4.6.5 Communications

The desired outcome is reliable telephone, radio, and pager services that provide best value to the Government.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall provide telephone, radio, and pager services for the Hanford Site.

C.4.6.5.1 Emergency & Commercial Radio

The Contractor shall:

- Provide engineering, maintenance and operations of radio communication services, including two-way, fire dispatch, safety and EP, security systems, and infrastructure.
- Manage radio spectrum licensing and design, engineering integration, O&M, installation, upgrade and required system calibration services, and registration of radio frequencies with the National Telecommunications and Information Administration.
- Coordinate with the Spectrum Working Group, as necessary.
- Provide or provide for repairs, replacements, and upgrades of radios and radio equipment.

C.4.6.5.2 Pager Services

The Contractor shall provide:

- O&M and account administration of the Government-owned Hanford Site pager infrastructure and commercial pager services, including Site, regional, and national paging services.
- System designs, integration, maintenance, frequency management, associated engineering services, and support to manage regional, international, and nonstandard inventory for pager replacement parts.
- Repairs, replacements, and upgrades of pagers and paging equipment.

C.4.6.5.3 Telephone

The Contractor shall:

- Provide and maintain telecommunications capability and capacity sufficient to meet the needs of the Hanford Site, encompassing those systems required to maintain data transmissions, including local, state, national, and international subscribers; data and network circuits; off-premise stations; telephone service to offsite offices occupied by Hanford Site end-users; alerting and crash alarm systems; and other miscellaneous voice and data circuits.
- Provide, or otherwise obtain, telecommunications for off-premise main station lines and trunks.
- Ensure that performance of maintenance, operation, construction, installations, equipment moves, or other work that will interrupt or adversely affect a significant portion or essential function of the system is scheduled outside of the Site's normal working hours. The Contractor shall minimize the duration of such interruptions.
- Provide, or provide for, repairs, replacements and upgrades of telephones, and telephone equipment.
- Provide a fully qualified individual for on-call support outside of normal working hours for dispatch to major trouble areas.
- Be responsible for contacts and coordination with the local tariff and non-tariff telephone companies to include service and maintenance activities associated with the Federal Telecommunications System access lines, use of current Network Numbering Exchange codes, and central office trunks.
- Develop and implement a plan, subject to approval by the CO, to migrate from on-premise to commodity (federal or commercial) hosted VoIP services.

Boundaries, Constraints, and Interfaces: None.

C.4.6.6 Mission Information Technology

The outcome is for Mission Information Technology to provide the users and customers to have the necessary technology to accomplish the Hanford mission.

Key Customers

- DOE
- OHCs

Scope and Requirements

C.4.6.6.1 Information Systems and Application Hosting Services

The Contractor shall manage and perform steady-state operations, maintenance, development and enhancements for Hanford Site data systems, supporting both project and business functions.

This includes database management, infrastructure maintenance, and application hosting services. The Contractor shall provide or manage Application Hosting Services to include:

- Existing shared and dedicated file servers hosting user applications, including servers supporting application development, test, and production environments, group share areas, and specialized shared web and database servers.
- Platform operating systems-level database administration, consultation, and technical expertise for the development, construction, and maintenance of relational databases required for the functionality of end user applications. Services provided shall consist of technical expertise and sustaining support for the installation, upgrade, backup and recovery, performance tuning, and monitoring of database applications.
- Development and implementation of a plan, subject to approval by the CO, to identify and migrate systems containing no Freedom of Information Act (FOIA)-exempt information to publicly accessible hosting at a rate of 25 percent of the identified systems yearly.
- Development and implementation of a plan, subject to approval by the CO, to identify and eliminate duplicative and unnecessarily redundant systems, at a rate of 25 percent of the identified systems yearly.
- Identification of DOE contractual, regulatory, or other inefficiencies.

C.4.6.6.2 Commodity Information Technology

The following objectives are sought through this acquisition:

- Achieve uniform prices and measurable total cost savings while maintaining or improving current service capability levels;
- Obtain significant reporting and transactional data to enable DOE to better manage spending for IT products and services;
- Ensure regulatory compliance in the acquisition of IT products and services to include; sustainable purchase requirements and the Trade Agreements Act;
- Align purchasing with existing agency business practices; and
- Improve ordering process for IT commodities.

The overall goal is to allow the Government a fast and effective way to order IT commodities at sharply discounted prices with prompt, cost-effective delivery and effective customer service, while capturing economies of scale, ensuring compliance with applicable regulations, fostering markets for sustainable technologies and environmentally preferable products, and simplifying data collection.

The Contractor shall integrate and manage commodity IT products and services including both Government-furnished equipment (GFE) and allowable/reimbursable purchases made by DOE contractors in accordance with the IT standards and governance process, where approved by the CO, for the Hanford Site including, but not limited to:

- Email and wireless email;
- Mobile Device Management;
- End-user hardware logistics, management, and maintenance;

- Telephone;
- VTC;
- End-user devices/services (e.g., desktops, thin or zero clients, laptops, tablets, phones, printers);
- Desktop (e.g., operating system; Desktop as a Service);
- Internet access;
- Convenience copiers and reprographics;
- Help desk;
- Pagers;
- Radios;
- Device disposition (e.g., sanitizing, shredding, recycling);
- Software development;
- Photo/video/multi-media services; and
- Aerial surveys and photography.

C.4.6.6.3 Help Desk Services

The help desk/user services scope provides customers with technical support services, including desk-side software support, user account administration, and support in a timely, friendly, and knowledgeable fashion.

The Contractor shall:

- Update and administer the network Hanford User Help website.
- Monitor customer satisfaction surveys.
- Document service-affecting events related to the network and the key/critical and key/essential applications within 10 minutes of discovery on a website accessible to users.
- Update the recovery status in no less than in 60 minute intervals.
- Document the eventual closure of the event within 15 minutes of final restoration.

The Contractor shall provide:

- Input to the subcontractor and OHC configuration control processes;
- Central help desk support for users of computing and telecommunications services, accessible via phone and web that provides timely resolution and tracking of issues;
- Users with one telephone number to call for support, as well as a web ticketing capability for users to enter support requests; provide diagnosis and resolution for customer desktop problems, including resolution of more complex, technical software problems;
- Continuous end-user field support, including desktop computer support focused on software and network problems;
- Support for non-standard software and specialized projects, such as specialized training or business consulting as defined by Hanford Site customer requirements;

- Requests that cannot be handled over the phone shall be escalated to the appropriate teams in the field or to appropriate service providers for resolution;
- Desk-side software field support for Hanford Site computing and telecommunications products when the original request cannot be resolved over the telephone. Field support includes installing software, troubleshooting, and restoring files for network users;
- Assessment of customer satisfaction routinely, and include questions regarding the timeliness, accuracy, and quality of service received; and
- Support during non-standard hours at a level commensurate with the request volumes anticipated during those times.

Boundaries, Constraints, and Interfaces: None.

C.4.6.7 Records Management

The desired outcomes are proper management of DOE records and prompt disposition of inactive records; ready and accurate access to records while increasing efficiency and productivity of the service, low-cost storage of inactive records that are accessed easily, accurately, and when needed by the customer; and major records collections that are identified, indexed, authenticated, and easily accessible by users.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall provide:

- Information inventory and schedule services for records, including those documenting the missions, programs, projects, and administrative functions (records inventoried and scheduled include electronic systems, databases, spreadsheets, microform, photo, hard copy paper, and other formats/media);
- Imaging services (including scanning and indexing) to facilitate the migration to electronic records; and
- Long-term physical storage for hard copy paper and other hard copy media records and maintenance of information systems to manage that collection.

C.4.6.7.1 Hanford Site Administrative Records and Information Repositories

The Contractor shall establish, manage, and maintain integrated Hanford Site Administrative Records (AR) and Public Information Repositories (PIR) that meet applicable requirements of NEPA, the Tri-Party Agreement (TPA) (e.g., Comprehensive Environmental Response, Compensation, and Liability Act [CERCLA], RCRA, and Administrative Procedure Act), and other legal and regulatory requirements applicable to Hanford's environmental remediation and permitting programs.

In collaboration with OHCs, the Contractor shall:

- Establish and maintain procedures for management/administration of the Hanford Site AR.
- Establish and maintain a document review process to screen documents to be included in the Hanford Site AR.

- Index, manage, retrieve, and make available to the public Hanford Site AR records and data.
- Maintain PIRs.
- Establish and maintain procedures for CUI review and CUI accessibility of AR documents.

C.4.6.7.2 Quality Assurance Records

A Records Management Plan shall be developed and submitted to DOE for approval within 60 days of completion of transition, and updated thereafter when changes occur. Included in the Records Management Plan, the Contractor shall develop and implement a Records Disposition Plan, which shall include processing records to storage (e.g., onsite, Federal Records Center [FRC]) and the destruction process for records and information content.

The Contractor shall:

- Disposition records.
 - Disposition activities include scanning to electronic media, transferring of paper records to an FRC, maintaining electronically in an electronic records system such as the Integrated Document Management System (IDMS), and/or destroying once retention has been met and proper approvals obtained.
- Ensure proper DOE Records Disposition Schedule are assigned, boxed, indexed, complete transfer paperwork, and obtain DOE approval prior to sending transfer paperwork and/or shipping inactive temporary records to a FRC and/or permanent records to the National Archives and Records Administration (NARA).
- Complete destruction certificate and submit to DOE for review and appropriate approvals prior to destruction.
- Develop an Image Quality Statistical Sampling Plan that is based on industry standards, and submit to DOE for approval within 60 days after NTP.
- Ensure records generated through the performance of the Contract, which may be identified as a QA record, are:
 - Categorized (lifetime/non-permanent); and
 - Maintained for traceability to the applicable item, activity or facility.
- Maintain and preserve records for final turnover to DOE, including the historical records collection (regardless of media) for activities performed under the DOE contract and stored onsite, at the Contractors facilities or offices, and at the FRC and records deemed by the Contractor to be proprietary records (regardless of media) including the software associated with the records used by the Contractor in the fulfillment of Contract requirements. The Contractor shall be responsible for receipt of records, schedule verification/validation or scheduling of records, importing into the electronic records system(s), storage/preservation, indexing, retrieval, copying, and final turnover to DOE.

C.4.6.7.3 Hanford Radiological Records Program

The desired outcome of the Hanford Radiological Records Program (HRRP) is a records and data management system(s) that provides demonstrated compliance with the records and data retention requirements of key customers, and provides retrievable, technically sound, defensible records and data

for determining the adequacy of current and former Site radiological control programs in protecting the health and safety of workers, the public, and the environment.

Scope and Requirements

The HRRP shall be designed and implemented based on the types and quantities of records and data generated by Radiological Site Services (RSS) programs, and the expressed types and quantities of associated records and data required by key customers, including managing the existing records and databases associated with past Hanford Site occupational and area radiation monitoring programs. The HRRP shall be managed in a fully integrated manner with other RSS programs.

The Contractor shall:

- Provide the staffing and personnel required to perform HRRP services, including records and data processing, data validation, issuance of required reports, and maintenance of historical records and data, including maintenance of software and instrumentation associated with the HRRP services.
- Design and maintain necessary data interfaces to allow for electronic transfer of data from RSS programs and/or customers to the maximum extent practicable.
- Perform validation of data entry for both electronic data transfer and manual data entry, including corrective actions necessary, as a result of such data validation.
- Generate and issue reports required by customers, including required termination, annual worker exposure, and visitor exposure reports.
- Maintain reproducible, retrievable radiation records for current and former Hanford Site workers.
- Provide representation to the Hanford Radiation Exposure System Users' Group and necessary logistical and administrative support for the Users' Group.
- Provide records support for litigation or workers' compensation hearings, Privacy Act or FOIA requests, Energy Employees Occupational Illness Compensation Program Act (EEOICPA), and DOE-approved requests for data in support of epidemiological or research organizations.
- Develop and maintain a system to capture and retain records of existing and past Hanford Site radiation dosimetry policies and practices.
- Establish an HRRP point-of-contact as the primary focus for routine services requests or information. Special requests requiring a commitment of additional resources shall be approved by DOE prior to fulfilling the request.
- Interface with customers to determine specific customer service needs and requirements, to facilitate necessary data transfer, to provide requested technical support, and to provide required reports.

C.4.6.7.4 Electronic Records Management System

Currently, the only certified electronic records management system on Site is IDMS, based on the OpenText Content Server product.

IDMS shall be used as the repository for internal electronic records, unless or until a replacement system is implemented.

The Contractor shall develop and implement a plan, subject to approval by the CO, to:

- Establish an externally accessible, publicly readable, certified electronic records management system; and
- Migrate existing electronic records with no FOIA exemptions to the external system.

C.4.6.7.5 Inventory and Schedule Management

The Inventory and Schedule Management scope of work provides the service processes for records under the scope of this Contract and for designated contractors. This work addresses records (and non-records) originated or held by covered contractors and includes records in media, including electronic systems, databases, spreadsheets, microform, photo/negatives, hard copy paper, and other formats and media. Content (records) management/inventorying and scheduling requirements are covered in various DOE directives and NARA regulations.

The Contractor shall:

- Provide life cycle management for records, regardless of media.
- Implement record identification and capture as records are created in business and program/project processes.
- Develop, implement, or use standard methodology to determine the value of the records in various formats.
- Participate in the development of records retention schedules, working on Government-wide, DOE-wide, Hanford Sitewide, or Contract-specific initiatives for records schedule improvements.
- Manage the Records Inventory and Disposition Schedule (RIDS) database and manage the update process. The Contractor shall maintain detailed inventories of records holdings, including records contained in information systems or other electronic formats. The inventory shall address how the records are maintained, where they are stored, and document the records' authenticity/integrity.
- Conduct assessments of Records Management to ensure that programs are properly documented and are in compliance, records schedules are consistently applied, and that storage meets required standards.
- Report to DOE on the ongoing records inventory process to include a description of the process followed and document the strategy utilized to ensure electronic records have been identified and inventoried, bi-annually or as directed by DOE.
- Ensure delivery of hard copy and electronic records to approved records repositories, using information from the RIDS database.
- Provide training and consulting needed to ensure that information retention and disposition policies and processes are interpreted and applied consistently among OHCs.
- Coordinate records turnover between projects/contractors to facilitate various stages of projects. The Contractor shall coordinate with project managers to ensure projects have adequately addressed records needs.
- Work proactively and collaboratively with DOE-HQ, NARA, other DOE sites, and subject matter experts (SME) with regards to records schedule development.
- Coordinate with onsite electronic archives, as well as NARA, to arrange for the delivery of electronic record material, as appropriate.

- Manage the Vital Records program for the Hanford Site in approved electronic records system(s).

C.4.6.7.6 Major Collection Management

This service is an integral function of an effective content (records) management program.

Major Collection Management provides continued maintenance of significant collections of records. Examples of major collections include engineering drawings, photographs/negatives, dosimetry readings, and videotapes.

The Contractor shall:

- Ensure that records in identified collections are indexed, authenticated, metadata complete, and are accessible to those that have a business requirement.
- Continue to improve on accessibility issues (such as indexing of photos).
- Recommend to DOE when a collection of records can be dispositioned in an alternative (more effective) method.
- Provide records retrieval support and evaluate records requests to ensure that appropriate procedures are followed, such as those for security, confidentiality, and privacy.

C.4.6.7.6.1 Controlled Document Management Services

The Contractor shall manage controlled document release and distribution services via electronic and hard copy media for technical, and other controlled documents required by Site personnel in the conduct of their work, to ensure that holders of controlled documents continue to have access to the current version. This service provides the following document control services for Hanford documents:

- Make controlled distribution of Hanford documents by hard copy and/or electronic media for selected Hanford technical and engineering documents.
- Process and issue controlled notebooks/logbooks.
- Maintain the document tracking and application database system for controlled documents.
- Capture of receipt acknowledgements for specific distributed documents as necessary.
- Capture the record copy of controlled documents.
- Distribute recall notices to customers of controlled documents.

C.4.6.7.7 Long-Term Records Storage

The long-term records storage program provides for physical storage of many thousands of records in various hard copy media (paper, photographs, video, and tapes).

The Contractor shall:

- Establish and maintain a procedure to ensure records, documents, and electronically stored information are retained in accordance with litigation holds issued by DOE or OHCs. Retention may extend beyond the requirements of applicable DOE and NARA Standards.
- Provide for physical storage of inactive records generated on the Hanford Site by DOE and OHCs.
- Accept records boxes for storage and coordinate with the NARA FRC in Seattle, Washington, and/or other approved offsite records storage facilities, as required.

- Manage the Records Holding Area – Management Information System, including information regarding box content, records schedule, and retention period.
- Establish and maintain Hanford Site procedures and processes for records storage.
- Effectively manage inventory and FRC and/or other approved offsite records storage facilities shipping strategies, to lower costs.
- Track unit cost data for content (records) management.
- Provide search and retrieval services for onsite contractor and DOE staff.
- Coordinate the retrieval of boxes located in the Seattle, Washington FRC and/or other approved offsite records storage facilities for onsite contractors and DOE. Standard retrieval shall be provided within four (4) working days. In accordance with approved procedures, urgent retrieval requests shall be provided within two (2) working days and immediate access to specifically identified information (through scanning and emailing) shall be available to Hanford Site customers.
- Manage the set of active records commonly referred to as central files, to ensure the correct configuration-controlled engineering documents are available to support the Site mission.
- Perform the following services for the management of active Hanford records:
 - Receive, store, maintain, and retire active Project Hanford-numbered documents in the central files repository.
 - Provide retrieval services for legacy hard copy and microfilmed active record material, including specifications and VI, in the Central Files and VI repositories.
 - Report Contractor efforts and recommendations for making the records storage process more cost-effective, including controlling and lowering costs associated with storage and with shipping to and receiving records from the FRC and/or other approved offsite records storage facilities. This report shall include statistical data regarding ongoing costs and numbers of records and retrievals being managed.
 - Submit an annual inventory of the Hanford Site vital records.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints:

- Participation on schedule updating must include input, recommendations, and buy-in from the record originator.
- The physical limitations of the current onsite records storage facility (24,000 cubic feet) restrict the volume of records that can be maintained onsite.
- Classified boxes must be retained onsite. There is a prohibition against shipping classified boxes to the Seattle, Washington FRC and/or other approved offsite records storage facilities.

Interfaces: FRC and/or other approved offsite records storage facilities, and other federal agencies. Searches for documents in discovery or as a result of litigation or investigation often result in coordination or consultation with staff in DOE-HQ and U.S. Department of Justice, to ensure that

appropriate search methodology is followed or to discuss search results. Extensive coordination with different Hanford and offsite organizations is required, including:

- Records Holding Area staff and the NARA FRC to arrange for shipments to/from the FRC and/or other approved offsite records storage facilities.
- Records Holding Area staff and Hanford Patrol to ensure adequate security are in place during shipments.
- Records Holding Area staff and the transportation contractor to ensure timely receipt of shipped boxes.
- Records Holding Area staff and onsite movers to ensure timely delivery of boxes to/from the Records Holding Area.

C.4.6.8 Correspondence Control

The desired outcome is a Correspondence Control function that provides a highly reliable correspondence management process and electronic system that enables administration of correspondence in a timely and efficient manner.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall provide correspondence management for DOE, which consists of opening, scanning, and electronically distributing mail (using DOE-provided distribution matrices). The Contractor shall additionally assign and track commitments using the designated electronic system for incoming and outgoing correspondence.

Correspondence is managed in both hard copy/paper and electronic formats. The Contractor shall continue to transition to electronic images as the record copy; however, there will be an ongoing requirement to manage some correspondence in paper format.

The Contractor shall open and date-stamp incoming mail addressed to federal employees. Items that are not time-sensitive or strictly business-related, such as training announcements released to a wide distribution, publications, supply catalogs, extra copies of distributions, shall be placed directly into the organization mailbox without further processing.

The Contractor shall provide backup support for the receptionists supporting DOE facilities at 2420 and 2430 Stevens Center Place, Richland, WA.

For incoming correspondence that is to be processed, the Contractor shall:

- Determine the federal individual responsible for the correspondence (i.e., actionee) in accordance with DOE-provided direction.
- Appropriately mark and distribute the correspondence in accordance with approved procedures and utilizing designated electronic systems.

- Process incoming correspondence and ensure that distribution is made to recipients/actionees within 10 working hours of receipt. The time of receipt shall be the time correspondence is received from the mail personnel.
- Maintain the current records schedule for correspondence in accordance with DOE-provided direction.
- Update and maintain the DOE Correspondence Subject Matrix for distribution of incoming correspondence.
- Provide DOE with a written process, including procedures, for ensuring correct records schedule information is assigned to correspondence. Upon receipt and scanning of correspondence into an automated records system, the correspondence shall be readily identified and retrievable by records schedule.
- Manage hard copy paper records of incoming or outgoing correspondence that cannot be electronically managed or archived.
- Coordinate with the receptionist at 2420 Stevens Center Place, Richland, Washington, to deliver and hold incoming mail for building tenants.

For outgoing correspondence, the Contractor shall:

- Scan and index the correspondence prior to mailing.
- Perform internal distributions (to DOE) electronically, unless specific limitations are in place.
- Mail outgoing correspondence to recipients in the specified manner, including the DOE “pouch” for mail directed to DOE-HQ recipients.
- Process and distribute outgoing correspondence within 10 hours of receipt. Distribution shall be considered complete when placed in the outgoing mailbox (for pickup by the onsite mail contractor staff), or when transmitted electronically to onsite staff recipients.
- With minor exceptions, file and maintain incoming and outgoing correspondence. As appropriate, retire the records to long-term storage and provide a document-level inventory of the documents retired for easy retrievability.
- Provide a monthly Correspondence Processing Report that includes the timeliness and volume of correspondence processed.
- Coordinate with the receptionist at 2420 Stevens Center Place, Richland, WA, to collect outgoing mail for tenants of that facility.
- Until such time as the Contractor proposes and DOE approves system changes, use the current records management application (IDMS), software scanning hardware/software/technical, and the same indexing standards, to ensure data consistency and integrity.

Boundaries, Constraints, and Interfaces: None.

C.4.6.9 Multi-Media Services

The desired outcome is a reliable and cost-effective multi-media services function where photos, videotapes, and other electronic media are correctly indexed (metadata applied), and that photos/videos

taken or acquired are made available to others in the Hanford/DOE complex without significant duplication of effort.

Key Customers

- DOE
- OHCs

Scope and Requirements

The multi-media organization shall be a centralized resource for the Hanford Site.

The Contractor shall:

- Create one (1) or more standards and procedures, to be used by OHCs (and the Contractor), that establish safeguards to ensure that photos and videos are appropriately indexed, managed, and in a central repository (potentially a “virtual” central repository) where the Contractor has control. Metadata standards for electronic media shall be established at a level that allows for easy and accurate retrievability. The standards/procedures shall direct that photos and videos, taken or acquired, be indexed, and the images/photos merged into a Hanford Site archive or clearinghouse.
- Perform an annual self-assessment that demonstrates the relative success of efforts to collect, index, and manage relevant photographic images in the central repository.
- Input project-related video tapes, movies, audio productions, and other similar types of media as a user-based service.

Boundaries, Constraints, and Interfaces: None.

C.4.6.10 Site Forms Management

The desired outcome of the Site forms management function is a compliant, cost-effective customer service-oriented function that applies configuration control, results in consistent design, where appropriate, and maximizes the use of electronic forms in gathering of electronic record information to electronic records systems.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall:

- Provide a centralized and configuration-controlled forms management program.
- Administer the Hanford Site forms management system and process, and design electronic forms, as well as conventional hard copy forms, for interactive use.
- Develop/design/revise/approve electronic and hard copy forms, eliminate obsolete or duplicate forms, maintain Site forms historical records, and maintain the system for centralized CM of Site electronic and conventional hard copy forms.
- Ensure consistently designed forms, utilizing automation as appropriate.

- Use existing software, pending an evaluation, to determine cost-effective alternatives.
- Monitor program costs for identification of cost efficiencies; costs shall be measured and reported annually.
- Maintain the automated audit system for Site forms.

Boundaries, Constraints, and Interfaces: None.

C.4.7 Business Services

C.4.7.1 Personal Property Management Program

The desired outcome of the Personal Property Management Program is a personal property management system that enables effective and efficient stewardship of personal property assets, and optimum reuse and disposal of federal personal property.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall:

- Submit a Sitewide Personal Property Management Program (Property Management System) to DOE for approval within 60 days of completion of transition that provides for the following:
 - Develop and implement Sitewide policies and procedures for the management of personal property, in coordination with OHCs.
 - Conduct a complete wall-to-wall physical inventory, including bar coding and tagging as applicable, and provide a report to DOE within 90 days of completion of transition.
 - Excess property dispositioning.
 - Provide maintenance of warehouses and routine preventative maintenance and repair of associated inventory.
 - Manage and maintain a property database, including providing property management reports.
 - Identify and mark (tagging) property received and processed through centralized receiving docks.
 - Manage the Sitewide personal property borrowing and loaning activities (domestically and abroad); loans of Government property to and from non-contractors, other DOE Sites, and/or other agencies.
 - Manage the Sitewide precious metals recycling program, and providing required precious metals reports.
 - Provide reports regarding stores inventory, such as turnover ratios, reorder point and reorder quantity, value of onsite inventory, and inventory accuracy report.
 - Maintain an accurate inventory and accountability of personal property through the life cycle of the Contract.

- Control of sensitive items and controlled substances under the Contractor’s control (e.g., computers, laptops, cameras, mobile phones, and projectors).
- Manage returnable containers and other items needing to be returned to manufacturers for credit.
- Facilitate transfer of mobile offices between Site contractors.

Conduct of Maintenance

The Contractor shall provide personal property maintenance, including the following:

- Disclose and report to DOE the need for replacement and/or capital rehabilitation. In accordance with DOE guidance, the Contractor also shall complete the deferred maintenance (DM) and Repairs Disclosure for Personal/Capital Equipment Form by September 30 for each year. For capital equipment not to be reported on by the Contractor, a request also shall be submitted to DOE for approval of non-reporting.
- Ensure that the estimate for the DM and Repairs Disclosure for Personal/Capital Equipment Form includes amounts to restore the asset to its operating condition, not to upgrade an asset or expand its capacity pursuant to the cost/benefit considerations provided by accounting standards. DOE has determined that the requirements for DM reporting on personal property or capital equipment is not applicable to property items with an acquisition cost of less than \$100,000, except in situations where maintenance is needed to address worker and public health and safety concerns.
- Align and integrate the Activity Level Work Planning and Control Program that provides the ability to track applicable personal property maintenance cost and schedule.
- Align and integrate applicable personal property in the Computerized Maintenance Management System (CMMS).
- Provide DOE a company-wide maintenance report for personal property preventative, predictive, and repair maintenance activities and costs as part of real property reporting.

C.4.7.1.1 Disposition of Excess Personal Property

The Contractor shall:

- Provide for disposition of Government-owned, Contractor-managed personal property no longer required in support of the Hanford Site mission. Disposition of assets shall be accomplished through reutilization to OHCs, DOE, and federal and state agencies; sale or other transfer; and recycling. Excess materials and equipment received from OHCs shall be processed through the disposition program.
- Manage planning, coordination, asset isolation, cleanup, preparation for removal, transfer, and other activities required to complete the transfer of targeted assets.
- Process scrap metal, paper, wood, and recyclable materials through vendors qualified to accept the materials.
- Ensure revenue received through the sale or recycle of assets is segregated and auditable by DOE, and the Contractor may credit the net proceeds to this Contract as approved by DOE.
- Dispose of excess/surplus items within the required timeframes.
- Provide to DOE a Disposal of Excess and Surplus Personal Property Report annually.

- Implement and maintain a process for the donation of excess property to an offsite location.

C.4.7.1.2 Inventory Management

The Contractor shall:

- Manage the assigned central receiving warehouse, convenience storage and spare parts warehouses, and other assigned warehouses. Warehouse operations shall provide for tagging and barcoding (as needed), tracking, storage, maintenance and disbursement of inventory items. As required, the Contractor shall provide for delivery of inventory items to onsite locations managed by OHCs.
- Conduct a joint, with OHCs, annual inventory of the central receiving warehouse and the convenience storage warehouse.
- Provide inventory management services to maintain appropriate levels of designated supplies, reorder point and reorder quantity, and emergency response-related items, to ensure the timely availability of critical items to support the Hanford Site mission.
- Manage the supply chain, and evaluate Sitewide demand, usage trends, and programmatic requirements and lead efforts for the reduction of existing line item Site inventory to the lowest achievable levels.
- Establish the most cost-effective method to provide common-use and critical items, including onsite storage, just-in-time contracts, and basic ordering agreements.
- Maintain stock on hand or provide immediate access to critical items.
- Prior to purchasing personal property, the Contractor shall follow the priorities for use of mandatory government sources in FAR Part 8.
- Support the automated material systems required to provide customer access, accountability, and accountability storage items for the Hanford Site.
- Administer the spare parts program for the Hanford Site.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints:

- The Department has determined the requirements for DM reporting on personal property or capital equipment is not applicable to property items with an acquisition cost of less than \$100,000, except in situations where maintenance is needed to address worker and public health and safety concerns.
- Community Reuse Organization and its contractors shall not be granted access to the Hanford Site for receipt of excess property.

Interfaces: Those involved in the property excess/disposition program, including colleges and universities; primary and secondary schools; federal, state, and local governments (including GSA); and Community Reuse Organization, if applicable.

C.4.7.2 Energy Employees Occupational Illness Compensation Program Act Support

The desired outcome of EEOICPA Support to DOE-RL Sitewide is an administrative system that provides timely and accurate submission of requested records and documents.

Key Customer

- DOE

Scope and Requirements

The Contractor shall:

- Maintain and provide documentation on current or former Hanford Site contractor employees in support of the EEOICPA, as well as provide information on project or program activities to support DOE or other agency or organization data capture efforts in support of EEOICPA.
This documentation shall include personnel records of current and former employees of the current Contractor and former contractors, including, but not limited to, industrial hygiene (IH) records, dosimetry records, badging records, and information from Hanford Resources Information System.
- Provide other information about its current employees and subcontractors, including a complete copy of the personnel record, as well as information about employees and subcontractors of former contractors in its possession, upon request, within 30 days.
- Conduct research and records searches as requested within an agreed upon time frame.
- Perform other records research, as needed, to complete the Department of Labor claims or to locate records needed to complete the claims or other related EEOICPA requests.
- Provide ad hoc reports, briefings and other information as directed by DOE.
- Provide cost reports by the 10th day of the month, segregating costs by type of request or by organization, as directed by DOE.
- Provide an EEOICPA point-of-contact; this employee shall attend meetings, as requested by DOE.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: Shared data areas utilized to receive claim requests and to return completed claim information will be provided.

Interfaces (these interfaces shall be in coordination with DOE): Outside agencies, including, but not limited to U.S. Department of Labor, National Institute for Occupational Safety and Health, and advisory boards.

C.4.7.3 Hanford Workforce Engagement Center

The desired outcome is a Hanford Workforce Engagement Center (HWEC) that provides a premier service center staffed with experienced representatives equipped to help current and former Hanford employees and their families who have questions or concerns about occupational health issues.

Key Customers

- DOE
- OHCs
- Hanford Site Subcontractors

Scope and Requirements

The Contractor shall:

- Operate the HWEC and be responsible for providing and maintaining a center with the primary customer as the Hanford Site workforce.
- Furnish personnel, facilities, equipment, materials and supplies required to accomplish the mission of the HWEC, except for that specifically identified as provided by the Government.
- Operate the HWEC Monday through Friday, on a schedule that provides flexibility for workers to meet with staff in person.
- Have Staffing provide for worker involvement by including Hanford Site employees as worker liaisons. There shall be at least one Hanford Atomic Metal Trades Council and one Building Trades Worker liaison.
- Operate the HWEC to ensure staff/workers will provide information related, but not limited to:
 - State of Washington Workers' Compensation Program;
 - DOE's Third Party Administrator for the Workers' Compensation Program;
 - EEOICPA;
 - Former Workers Medical Screening;
 - Beryllium (Be) Health Program; and
 - Hanford Site Contractor points-of-contact for contractor specific programs.
- Provide printed written materials (e.g., brochures, pamphlets), as well as non-printed, educational and learning materials (e.g., electronic, web-based) supporting and relative to the above mentioned programs as appropriate.
- Maintain both an internal and external website with current information, as appropriate, on the above mentioned programs.
- Maintain communications, as appropriate, with the Office of the Ombuds, Federal Department of Labor, and Washington State Department of Labor & Industries for matters related to the processes affecting the Hanford Site workforce.
- Maintain regular communication with OHC Human Resources Departments and liaisons for workers' compensation.
- Visit the Hanford Site on a regular basis to provide information and keep workers current with information on the available resources.
- Provide updates and trending, as appropriate, to DOE.
- Conduct routine outreach to ensure current and former Hanford workers are aware and have available information on the HWEC.

Boundaries, Constraints, and Interfaces:

Boundaries and Constraints: In its communications with external entities, clearly indicate that it does not represent or speak on behalf of DOE, its contractors, or current and former employees. The HWEC shall not represent, nor act on behalf of Hanford employees in any proceeding to which DOE or its contractors

are a party or entity in interest, including but not limited to any administrative or judicial proceedings, unless expressly authorized by the DOE CO.

Interfaces: DOE, Office of the Ombuds, Washington State Department Labor and Industries, Federal Department of Labor, Hanford Site Contractors and employees, other agencies as appropriate.

C.4.7.4 External Affairs

The desired outcome is a wide-ranging and inclusive External Affairs/Public Relations program that provides timely responses to DOE requests for information and assistance, outreach to keep external constituencies informed about work under the contract, an effective Hanford website, and integrated and effective Site tour planning.

Key Customer

- DOE

Scope and Requirements

For external constituencies, the Contractor shall anticipate specific areas of concern, interest, or controversy, and employ appropriate communication strategies that inform and involve, ensuring close coordination with DOE Communications personnel throughout. DOE retains the primary role in directing the timing, substance and form of public information and approves products and outreach.

The Contractor shall:

- Submit an External Affairs Program Description for DOE-approval within 30 days after NTP that provides a comprehensive description of the External Affairs Program, staffing, products and services, with an emphasis on innovative approaches to communications.
- Develop, plan, and coordinate proactive approaches to dissemination of timely information regarding DOE unclassified activities. Proactive communications or Public Affairs Programs will include or make use of a variety of tools including, open houses, newsletters, press releases and/or conferences, audio/visual presentations, speeches, forums, and tours. The Contractor shall implement this responsibility through coordination with DOE in such a manner that the public, whether it is the media, citizen's groups, private citizens or local, state or federal government officials, has a clear understanding of DOE activities at the Hanford Site.
- Maintain effective interactions with local, regional, national and international news media. Provide information and/or resources as requested in support of DOE media interactions.
- Inform and involve the public, citizen's advisory boards, and other interested parties in proposed plans and activities. Provide strategy and resources for required public comment and outreach processes related to upcoming decision-making (e.g., NEPA and CERCLA).
- Reach out to the communities affected by the Hanford Site to provide information, answer questions, and gain feedback, when requested by DOE.
- Participate in tour planning and preparation, and make facilities and personnel available as requested by DOE. Visits to the project sites shall be part of ongoing communication and outreach activities.
- Maintain the external Hanford Site Website, including current information related to the HMESC and OHCs contract scope.

- Participate in meetings and briefings to update interested external parties on contract activities, when requested by DOE.
- Provide ongoing support to DOE in the preparation of communication materials, such as presentations, fact sheets, specialized graphics and charts, large posters, and up-to-date photography.
- Coordinate internal employee communication products through DOE for review and approval, if they are related to issues/incidents that have the potential to garner external media and stakeholder interest.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: The Contractor shall receive DOE approval prior to externally releasing information related to the Hanford Site.

Interfaces (these interfaces shall be in coordination with DOE): Media, members of the U.S. Congress and their staffs, community leaders, and a wide variety of stakeholders and local Governments.

C.4.7.4.1 External Review and Support

The desired outcome of the External Review and Support function is support that helps the external oversight organizations realize the Hanford Site embraces the common goal of ensuring protection of public and worker safety, and health and the environment. Essential secondary outcomes are to promote, through continuous improvement, the economy, efficiency, and effectiveness of DOE and contractor operations, and to prevent and detect fraud, waste, and abuse.

Key Customer

- DOE

Scope and Requirements

The Contractor shall support DOE in hosting staff from auditing and assessing organizations, providing required presentations, responding to information requests, and by providing required SME to respond to questions and information requests. Support activities shall be conducted in accordance with applicable DOE directives.

The Contractor shall support Defense Nuclear Facilities Safety Board (DNFSB) oversight activities by:

- Conducting activities in accordance with DOE commitments to the DNFSB, which are contained in DOE IPs and other DOE correspondence to the DNFSB.
- Providing support for the preparation of DOE responses to DNFSB issues and recommendations that affect contract scope.
- Cooperating with the DNFSB and providing access to work areas, personnel, and information, as necessary.
- Providing a wide range of support on DNFSB activities. The support requires providing information within a specified time, coordinating briefings (VTCs, teleconferences, reviews, site visits), managing correspondence (including transmittal of information) and tracking systems for information and commitments, coordinating DNFSB and DOE-HQ staff visits, and preparing documents and presentation materials for briefings and hearings.
- Providing DNFSB Site Representative(s) support. The support requires coordinating and ensuring Site access and training requirements for facilities and area access; coordinating Site services required

for day-to-day work performance, including but not limited to, office space, phones, computers, and document retrieval systems.

The Contractor shall support GAO, Office of Inspector General (OIG), and other governmental and DOE oversight activities by:

- Providing subject matter expertise;
- Cooperating with assessors and auditors, and providing access to work areas, personnel, and information; and
- Providing support during audits and assessments, including delivering information within a specified time, arranging briefings, preparing presentation materials, maintaining a record of documents provided in response to requests, and making this record available to DOE, as requested.
- Providing knowledgeable single points-of-contact for each of the following:
 - DNFSB; and
 - OIG, GAO, and other assessing governmental and DOE Oversight Organizations (including the DOE Office of Enforcement).

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: None.

Interfaces: DNFSB, GAO, OIG, other governmental and DOE oversight organizations.

C.4.7.5 Courier Services

The desired outcome is a safe, reliable, and cost-effective courier service that meets customer needs.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall:

- Provide courier services for the Hanford Site, including delivery and pickup of miscellaneous items, such as calibrated instruments, medical samples, equipment to be repaired, and essential (time sensitive, critical) documents.
- Provide transportation of priority or time-sensitive documents, medical samples or supplies (e.g., serum, blood samples, medical records), calibrated instruments, office machines to and from repair facilities, and pickup and shredding of classified documents.
- As part of the continuity of services review, the Contractor shall conduct an analysis of courier services in an effort to implement improvements and/or determine whether there is a continuing need for these services.
- Evaluate options for the type of transportation needed and make recommendations regarding the frequency and timing of courier activities.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: Drivers transporting classified information shall maintain an active DOE Q Access Authorization.

Interfaces: Offsite (local) vendors (such as in the case of equipment repairs).

C.4.7.6 Mail Services

The desired outcome is a timely, efficient, reliable, and safe mail pickup and delivery service that meets the customer needs on the Hanford Site.

Key Customers

- DOE
- OHCs
- Other organizations (located on and off the Hanford Site) affiliated with Hanford missions

Scope and Requirements

The Contractor shall:

- Provide timely, efficient, and safe mail pickup and delivery services for the Hanford Site.
- Develop a Mail Services Security Plan that addresses security and safety concerns. The Plan shall:
 - Be provided to DOE no later than 180 days after NTP, and implementation shall begin immediately upon approval of the plan by DOE.
 - Take into consideration current Federal Bureau of Investigation, U.S. Postal Service and DOE security bulletins and guidance on potential hazards, including anthrax and bomb detection.
 - Include training of mail personnel, as well as onsite customers, for early and effective identification of hazards.
 - Identify preparation for potential emergencies and hazard mitigation as appropriate.
- Strive to streamline delivery as much as possible.
- Deliver mail within two (2) days from receipt of the mail.
- Measure and report costs associated with postage (metered mail) on an as-needed basis, no less than quarterly.
- Ensure safety of the mail services customers through participation by the staff for identification and mitigation of concerns relating to bomb threats and exposure to hazardous materials (such as anthrax).
- Provide the Annual Mail Management Report to DOE by October 15.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: The Contractor shall be responsible for the interface between the U.S. Post Office and the Hanford Site, picking up general mail daily and specialty mail on an as-needed basis.

Interfaces: At least 70 onsite Hanford Site-related companies or organizations, U.S. Post Offices in the local community, and Hanford Site safety and security personnel.

C.4.7.7 Reproduction Services

The desired outcome is Reproduction Services that provide reliable, high-quality and timely high-volume printing, duplicating and engineering reproduction services.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall:

- Provide printing, duplicating, binding, and reproduction services for the Hanford Site. Reproduction includes duplication of paper, digitally transmitted documents, and engineering drawings; high volume copying services; color copies; forms reproduction; special bindings; and tabbing.
- Coordinate and contract with the Government Printing Office (GPO), as mandated by the Congressional Joint Committee on Printing (JCP).
- Manage/administer Site-wide contracts relating to the engineering and reproduction equipment, including the copier contract for the Hanford Site, which covers setup, delivery, removal, maintenance, and repair of equipment, and coordination of monthly billing activities.
- Provide the annual printing and publishing reporting information for the DOE/JCP report.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: GPO/Federal regulations apply to printing and reproduction, including a three (3) year minimum procurement cycle for new large-scale printing equipment.

Interfaces: None.

C.4.7.8 DOE Receptionists

The desired outcome is a knowledgeable and responsive receptionist on duty during normal working hours, who helps DOE and OHCs' visitors and employees to readily conduct business with the help of well-communicated, accurate, and adequate information and directions.

Key Customers

- DOE and OHC personnel located in 2420 and 2430 Stevens Center Place, Richland, WA.

Scope and Requirements

The Contractor shall:

- Provide receptionist support to DOE and its contractors and visitors within both 2420 and 2430 Stevens Center Place, Richland, WA.
- Assign, process, and account for temporary proximity cards and/or visitor badges issued to persons requiring access to DOE areas of 2420 and 2430 Stevens Center Place, Richland, WA, according to provided DOE criteria.
- Ensure adequate Airborne and Federal Express supplies are stocked and provide receipts for shipments to DOE.

- Reserve shared-use conference rooms, such as those at 2420 Stevens Center Place and 2430 Stevens Center Place, Richland, WA.
- Manage the check-in and checkout of Government vehicles by federal employees located at 2420 and 2430 Stevens Center Place, Richland, WA. This includes ensuring vehicle usage logs are correctly completed after each trip, and compiling and submitting logs monthly to the DOE Vehicle Coordinator.
- Provide a receptionist for 2420 and 2430 Stevens Center Place, Richland, WA, during regular business hours, Monday through Thursday 7:00 a.m. to 4:30 p.m., and Friday 7:00 a.m. to 3:30 p.m., including the Hanford Site Alternate Work Schedule (Friday off). Changes to this requirement shall be approved in advance by DOE.
- Maintain and control building office keys for offices and rooms in 2420 and 2430 Stevens Center Place, Richland, WA.
- Maintain the capability to grant proximity card access to 2420 and 2430 Stevens Center Place, Richland, WA.
- Provide backup support for the receptionist at 2420 and 2430 Stevens Center Place, Richland, WA.
- Coordinate with Correspondence Control personnel daily to receive and hold incoming mail.
- Collect outgoing correspondence at 2420 Stevens Center Place, Richland, WA, and coordinate daily delivery to Correspondence Control.

Boundaries, Constraints, and Interfaces: None.

C.4.7.9 Site Safety Standards – Common Safety Processes

The desired outcome is standardized Site safety programs to provide a consistent approach (where appropriate) that ensures Hanford Site workers perform work safely and effectively on the Hanford Site.

HMESC integrates and manages the integrated Hanford Site standardized safety and health programs, as defined in Appendix A of Hanford Integrated Standards Management Plan (MSC-MP-41080). The goal is to have integrated and standardized programs at Hanford for worker safety and health where there are similar hazards, requirements, and worker expectations. Since Hanford Site workers may perform work in facilities controlled by OHCs, safety and health could be improved by having integrated and standardized safety and health programs.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall:

- Work collaboratively and build coalitions with Site contractors, labor leaders, and workers to continue building a strong and enduring safety culture.
- Work with OHCs and workers to maintain integrated and standardized Site safety and health programs.

- Provide representatives to attend regular standardized Site safety and health programs.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: None.

Interfaces: Hanford labor representatives in the development and maintenance of common processes.

C.4.8 Real Property Asset Management

The Contractor is responsible for compliance with real property asset management requirements, federal rules and regulations, and applicable laws, regardless of the entity performing the work and is responsible for flowing down real property requirements to its subcontractors to the extent necessary to ensure compliance.

C.4.8.1 Planning and Budgeting

The desired outcome is a well-planned, budgeted, managed and executed real property program that is consistent, efficient, and compliant across the Hanford Site, and reflected in life cycle planning and budgeting.

Key Customer

- DOE
- OHC

Scope and Requirements

The Contractor shall:

- Ensure financial investments in real property are aligned to meet DOE mission needs and requirements. Real property asset planning includes strategic and tactical planning with short-term and long-term forecasts, as documented appropriately in master plans, ISAP, FYSP, Contract Performance Baseline, and Life Cycle Program Baseline.
- Develop and execute a strategy for managing the portfolio of Hanford real property assets. Master plans exist for key infrastructure systems, and the Contractor shall develop and maintain a complementary Facility Master Plan.
- Support DOE to meet the data requirements of the DOE Integrated Planning, Accountability, and Budgeting System.
- Develop a FYSP that forecasts financial investments for acquisition, sustainment and disposition of real property assets in accordance with EM guidance.

Facility Master Plan

The Contractor shall develop and maintain the Facility Master Plan that demonstrates a thorough understanding of the facilities on the Site and their linkage to current Hanford Site mission, regardless of the contractor assigned responsibility for the facility or the contractor who currently resides in the facility. Additionally, the Contractor shall, within the Plan, maintain a current master list of facilities.

The Contractor shall:

- Profile the needs of OHCs to demonstrate multi-contractor participation and integration of the process.
- Contain a master list of facilities that fall under the General Purpose Facilities (GPF) category and identifies those facilities that are currently dedicated to a specific program.
- Link the GPF to their current cleanup mission and evaluate their ability to meet mission requirements.
- Compare GPF demands to population projections through the year 2050 and identify gaps and overlaps. Also, perform GPF life cycle analysis and compare to Hanford mission requirements.
- Identify GPF that will not meet project mission requirements and develop an appropriate response strategy.
- Facilitate and lead the Joint Contractor Space Utilization Board or similar multi-contractor integrated facility management team in maintaining an agreed upon utilization standard to reflect the efficient use of GPF, identify facilities that are not being effectively utilized (as well as facilities that are over capacity), and develop and document recommendations to promote efficient operations and projects and to reduce costs and deficiencies.
- Conduct a periodic analyses of the current facility planning process and available tools, to identify potential areas of improvement and to support efficient operations.

Boundaries, Constraints, and Interfaces: None.

C.4.8.2 Conduct of Maintenance

The desired outcome is to minimize the likelihood and consequences of human fallibility or technical and organizational system failures through a single company-wide Maintenance Strategy that utilizes existing corporate programs and addresses Non-nuclear Facility(s), applicable Personal Property Maintenance, Project Maintenance - as it relates to betterment and repair (sustainment), Condition Assessments, Fire System Maintenance, Facility Services, Information Resources/Content Management (IR/CM), and Locksmith Services.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall establish and implement a single-compliant company-wide (corporate) Maintenance Program Plan (CMPP), for the Hanford Site, in accordance with the requirements of this Contract. The Contractor shall submit the single-compliant CMPP for DOE approval within 60 days of completion of transition. The CMPP shall include and describe the following:

- A single company-wide maintenance strategy that utilizes existing corporate programs and addresses non-nuclear facility(s), applicable personal property maintenance, project maintenance - as it relates to betterment and repair (sustainment), condition assessments, fire system maintenance, facility services, IR/CM, and locksmith services.
- Company-wide policies, processes, and procedures for each service/system that reflect a system-oriented graded-approach to predictive, preventive, and repair maintenance, including

periodic multi-discipline reviews of maintenance methods, techniques, and parameters; oversight activities; and the tracking of planned and actual maintenance cost at the work package level.

- Non-nuclear facilities, including real property assets shall be sustained by maintenance, repair and renovation activities at the component level to ensure mission readiness; operational safety; worker health, environmental protection and compliance; security; and property preservation, and meet program missions cost-effectively.
- A comprehensive Compliance Matrix that crosswalks detailed requirements (as specified in the requirements framework listed above) to implementing policy, processes, and procedures. The matrix shall be used to conduct annual reviews to assess company-wide compliance with DOE and Contractor requirements. As part of each annual review, the Contractor shall determine and document the basis for the maintenance program maturity state in terms of:
 - Reactive: Fix it after it fails (defer maintenance);
 - Planned: Fix it before it fails (plan schedule and coordinate);
 - Predictive: Measure it and fix it (predict, plan, schedule and coordinate);
 - Reliability: Don't just fix it, improve it (eliminate defects, improve precision, redesign and value focus); and
 - Enterprise: Improve and sustain (alignment–shared vision, integration of supplies, operations and reliability engineering, and differentiation of system performance).
- The development and implementation of an Activity Level Work Planning and Control Program.
- Use, implement, and operate a compliant CMMS for the tracking of SSCs Maintenance Activities Work Packages, including planned and actual cost and schedule for real property, down to the component level, and applicable personal property.
- CMMS attributes shall be described in the CMMP and submitted to DOE for approval. Once the CMMP is approved, changes, other than minor (e.g., administrative, no change to intent and rigor), to the CMMS will require DOE review and approval.
- The Contractor shall provide for full CMMS access to the Government, including licensing requirements for DOE staff, and shall contain a Master Equipment List for SSCs and associated:
 - Scheduled and unscheduled maintenance/services;
 - Service orders;
 - Individual and standing job orders;
 - Preventive, predictive, and corrective actions maintenance cost for each executed work order;
 - Spares inventory;
 - Metrics; and
 - Other uses as identified in the CMMS Attribute Requirements.

- Information entered into the CMMS is considered Government-owned for its present and future use and does not contain limitations on its use by the Government. The Contractor shall provide, maintain and operate the current Sitewide CMMS that meets the CMMS attributes requirements.
- Annual maintenance reporting shall be accomplished in conjunction with annual guidance and implementing direction provided by DOE.
- Project maintenance activities that will be applied to projects (modifications and/or new installations) include the following:
 - Engineer Studies: Consider alternatives that account for impacts on maintainability in recommendations for SSC maintenance and the cost saving to be achieved.
 - Design: Maintenance/operations reviews will be conducted throughout the design effort to ensure that maintainability and maintenance practices have been addressed and defined during the design process and in design documentation.
 - Construction/Installation: Maintenance/operations reviews will continue throughout the Construction/Installation Phase to determine that all maintenance/maintainability items identified during engineering studies and design activities have been addressed, scheduled, completed, and appropriately documented. A pre-startup maintenance plan will be prepared and used to address all the maintenance activities, including those listed below, to be completed prior to turn over to operations.
 - Startup and Turnover: O&M manuals will be field reviewed and as-required elements of the plans will be tested as part of the operation test plan. For the operations manual, the following shall be field verified: start-up and shut-down procedures, instructional pictorials, parameters for proper process conditions and instruction for parameter adjustment, safety issues, and potential hazards. For the maintenance manual, the following shall be field verified: spare parts list with schematics, suggested spares for stock on hand, lubrication specifications and frequencies, fit clearance (if required), assembly/disassembly drawings and instructions, bolt torque patterns and limits, failure mode effect analysis chart, mounting instructions, instrument calibrations procedure safety issues and potential hazards.
- Develop and submit annually a Maintenance Five-Year Plan, including forecast (by fiscal year) to identify financial investments for conduct of maintenance of Non-nuclear Facility(s), applicable personal property maintenance, project maintenance - as it relates to betterment and repair (sustainment), Condition Assessments, Fire System Maintenance, Facility Services, IR/CM, and Locksmith Services to support DOE strategic plans, program guidance, and DOE performance targets. Include consideration for desired level of service, remaining service life, current condition assessments, Energy Independence and Security Act (EISA) energy and water evaluations, utilizations surveys, the mission dependency of the asset, and projected funding for DM, and repair reduction. In addition, the plan should address the following:
 - Identified structures and process equipment that will be shut down and demolished within the next five (5) years;
 - Changes in the required manpower resource level or skills;
 - Necessary organizational realignment to meet obvious changes in work scope;

- Major equipment replacements/repair/recapitalization necessary to sustain required level of reliability; and
- Propose reduction of DM, by providing a reason and explanation for DM, possible solutions to removing it from the deferred status, and a list vulnerabilities determined in accordance with the company process.
- Submit a consolidated quarterly company-wide maintenance report addressing non-nuclear facility(ies), applicable personal property maintenance, project maintenance - as it relates to betterment and repair (sustainment), condition assessments, fire system maintenance, facility services, IR/CM, and locksmith services activities and associated work package costs for the company-wide service/system organizations. Reporting categories shall be used to collectively report maintenance activities and work package status and cost, specifically for the following:
 - Required categories for real property and personal property are preventive, predictive, and corrective actions;
 - Required categories for facility services are maintenance activities (real property and personal property) including work package status and costs; and for spare parts inventory stocking status and cost of critical spares parts; and
 - Required categories for projects are maintenance projects to replace or modernize existing facilities status including schedule, costs; and for DM reduction projects status including schedule and cost, and DM mitigation. In addition, the Contractor shall address the preparation and issuance of the report in the CMMP. However, if this information is to be provided as part of the company-wide mission assurance work scope then the Contractor shall provide a crosswalk in the CMMP.
- Perform maintenance for infrastructure systems, structures, components and facilities, including identifying maintenance service levels and labor requirements, skill gaps, scheduling requirement and issue, and metrics to ensure effective use of maintenance workforce. In addition, The Contractor, as part of this effort, for maintenance personnel loaned out or provided for facility services to OHCs shall compile and issue a monthly labor report summarizing available full-time equivalents (FTE), how many FTEs were requested and the FTEs used to account for costs.

Condition Assessment Surveys

DOE uses Condition Assessment Surveys to assess the current material condition of its facilities, structures, systems and equipment, and documents maintenance deficiencies. A condition assessment survey shall be accomplished in accordance with DRD-002, and in conjunction with annual guidance and implementing direction provided by DOE for real property data related to O&M.

The Contractor shall:

- Manage the Hanford Site condition assessment survey and Condition Assessment Information System (CAIS) to perform condition, functional and utilization assessments; identify and address deficiencies of real property down to the component level for corrective actions and associated costs; and reflect data accurately in the Facilities Information Management System (FIMS).
- Provide DOE with a list of facilities, other structures and facilities, real property trailers, and real property Conex boxes to be condition assessment survey inspected, each fiscal year, no later than November 15; and provide DOE with a list of facilities, other structures and facilities, and real

property trailers, and real property Conex boxes that have been condition assessment survey inspected, each fiscal year, no later than October 31.

Fire System Maintenance

Fire Systems Maintenance provides fire protection system inspection, testing, and maintenance (IT&M) of existing and new fires systems.

The Contractor shall perform required fire protection systems inspections, testing, and maintenance on facilities assigned to it under this Contract.

Perform functional IT&M of life safety and property fire protection systems (including backflow prevention devices) in facilities identified for this Contract.

The Contractor shall:

- Ensure configuration control of the fire protection systems within this Contract.
- Perform temporary and/or permanent facility fire protection system deactivations in support of deactivation and decommissioning activities associated with this Contract.
- Maintain the central auditable records for fire protection system activity within this Contract, as required by federal and State of Washington laws.
- Perform preventive and repair maintenance to ensure proper functioning of fire protection systems, equipment, and apparatuses. Apply priorities to the fire protection system IT&M for fire alarm and fire suppression systems to ensure that systems are available at least 99 percent of the time.
- Build up and maintain a cost-effective inventory of fire protection systems spare parts to support this Contract where long-lead procurements will be involved.
- Perform portable fire extinguisher IT&M.
- Fire system IT&M shall be performed only by qualified individuals. Individuals performing IT&M on fire suppression and fire alarm systems shall have a minimum Level II certification from the National Institute for Certification in Engineering Technologies (NICET). Contractors may perform fire system IT&M initially without NICET certified individuals but the individuals performing fire system IT&M shall have NICET certifications within one year from the issuance of the NTP. Individuals performing IT&M on backflow preventers shall have a Washington State Backflow Assembly Tester certificate.
- Services that may be contracted by OHCs through mutual agreement:
 - Fire system IT&M.
 - Portable fire extinguisher IT&M.
 - Backflow preventer IT&M.
 - Site Respiratory Protection, refills, and IT&M.
- The Contractor shall perform IT&M of the Hanford Site Radio Fire Alarm Reporting systems.

Facility Services

The Contractor shall provide facility services maintenance function for non-radiological facilities that provides a reliable and safe facility services that meet the needs of Site customers in a quality, timely, cost-effective, and energy-efficient manner.

The Contractor shall provide management and administrative oversight for requested facility activities, including planning and directing the work to provide for the following facility services in support of the Hanford Site projects and contractors: facility painting, sign painting, carpentry, locksmiths, refrigerated equipment service, insulation, pipefitting, electrical, sheet metal, instrumentation, cement finishing, glazier work, custodial, movers, equipment calibration, maintenance and repair, and heating, ventilation, and air conditioning maintenance and repair.

IR/CM Facility Management Services

The Contractor occupies facilities that house and/or store equipment necessary for the performance of this work scope, and will be responsible for these facilities. This scope of work covers the maintenance, continuity of operations, and security of those facilities the Contractor will be responsible for due to their housing and/or storing equipment, including telecommunications, network, datacenter, server, pager, radio, and other equipment, such as vehicles and machinery.

The Contractor shall:

- Provide IR/CM facility management services to those facilities that house or store equipment including telecommunications, network, datacenter, server, pager, radio, and other equipment which supports the IR/CM work scope.
- Maintain electrical power; supporting systems and panels; required backup generator; and supporting systems for assigned facilities, including: provide cooling and environmental controls, as necessary, to comply with hardware vendor requirements for standard operations.
- Provide minor repair services to assigned facilities.
- Provide physical security management of assigned facilities/structures.
- Monitor assigned facilities/structures for environmental and other physical conditions that could disrupt operations of equipment or services provided within or through the facility/structure.
- Support maintenance activities required by the Hanford Fire Department.
- Respond to power outages or other service effecting events in a manner to minimize impacts to the services provided to OHCs.

Locksmith Services

The Contractor shall:

- Provide a Locksmith Program that includes installation, replacement, and maintenance of locks, keys, and access control systems for the protection of nuclear materials (including SNM), facilities with radiological/toxicological sabotage concerns, classified matter, and Government property.
- Maintain a cost-effective inventory of locking hardware and devices, key stock, and spare parts to support Hanford Site security requirements where long-lead procurements are involved.

Boundaries, Constraints, and Interfaces: None.

C.4.8.3 Facilities Information Management System (Reporting Systems)

The desired outcome is a reliable FIMS that provides current, complete, and accurate information on real property holdings, enabling informed decision making in the planning, budgeting, operation, maintenance, and disposal of real property. Complete and accurate information on real property holdings is critical to DOE for managing facilities and reporting to GSA, OMB, and the U.S. Congress.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall:

- Manage the FIMS in meeting-specific annual reporting requirements, including data for the GSA's Federal Real Property Profile (FRPP) annual submission, and DOE's ability to verify and validate the accuracy of each FRPP submission.
- Coordinate and integrate with OHCs to collect data, meet data calls and reporting timelines associated with annual DOE reporting requirements as conveyed by DOE contract direction.
- Host and lead, in coordination with DOE and OHCs, a FIMS annual data validation effort of two (2) to three (3) days, encompassing records review, onsite asset inspection, and validation of a select number of records. Report the scorecard results, and develop a corrective action plan as applicable to DOE on an annual basis.
- Record, on an annual basis, the required annual maintenance costs, and other data elements that need to be updated annually in FIMS at the asset level utilizing the CMMS component level data.
- Maintain FIMS data as complete and current throughout the life cycle of real property assets, including real property related to institutional controls.
- Ensure data is complete, current, and accurate by reconciling FIMS with financial data residing in existing Hanford Site property databases on a quarterly basis and documenting the reconciliation in a file to be maintained by the Contractor's FIMS database administrator.
- Ensure the integration of GIS data in FIMS, as the capability of FIMS becomes available, to logically identify and depict the real property assets in FIMS to the physical assets on the ground.

Performance Measures

The Contractor shall coordinate and integrate with OHCs to develop real property performance measurement/metrics for the Hanford Site to trend life cycle management of real property assets in meeting the following:

- Making the infrastructure investments it has committed to make;
- Increasing the percentage of adequate facilities;
- Decreasing DM;
- Decreasing underutilized space;
- Eliminating excess facilities;
- Decreasing the annual costs of carrying excess facilities; and

- Decreasing risk to core capabilities due to infrastructure deficiencies.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints:

- Real property asset performance measures/metrics trends would be derived using CMMS and FIMS data.
- The DOE uses corporate performance metrics to measure performance of real property across DOE elements.

Interfaces: None.

C.4.8.4 General Purpose Facility Planning and Management

The outcome provides for the ability to coordinate, manage, and integrate the use general purpose facilities (e.g., office and warehouse space) among DOE and its contractors to achieve DOE Mission(s) for the Hanford Site.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall:

- As the lead, evaluate the supply and demand of facilities for the Hanford Site.
- Develop a Sitewide strategy and objectives for facilities management, space integration and utilization, workstation layouts and configuration controls, move planning and execution, repurposing space, administration of information, and building administration. The Sitewide strategy and objectives shall be developed and included as part of the Facility Master Plan.
- Provide administration and maintenance of the Sitewide facility system platform and software to achieve the ability to capture and track occupancy and utilization data for analysis and reporting; to identify availability of excess facilities and capacity for utilization and repurposing space; project management and system analysis; performance measurement data for metrics; maintain and update facility drawings; and provide data entry for moves.
- Develop and provide facility information for data entry into the facility system; such as, but not limited to, trending information, floor plans, workstation layouts, special data, occupancy and utilization data, data analysis and reporting, and data for metrics to ensure optimal utilization.
- Provide information that supports the conduct of maintenance, conditions assessments and FIMS activities.
- Conduct utilization surveys on an annual basis to identify property that is not utilized or is under-utilized or not being put to optimum use.
- Coordinate with DOE and OHCs to provide cost-effective, efficient, safe, and secure office and warehouse space utilization to meet operating requirements.

- Lead the Joint Contractor Space Utilization Board composed of representatives from DOE and its OHCs to promote efficient space utilization and repurposing space.
- Provide building engineering and move support for DOE occupied space and Hanford Training Center.

Boundaries, Constraints, and Interfaces: None.

C.4.9 Environmental Stewardship and Management

C.4.9.1 Land Management

The desired outcome is an integrated, and compliant Land-Use Planning and Management (CLUP) program for the Hanford Site that is protective of human health, safety, cultural resources, natural resources, and sustained good stewardship.

Key Customers

- DOE
- OHCs

Scope and Requirements

Actions involving the planning, acquisition, management, and disposition of interests in real estate shall be reviewed and approved by a Certified Realty Specialist (CRS), as appropriate, prior to execution. Real estate actions, subsequent to CRS review and approval, are executed at the appropriate level of delegated authority, such as authority possessed by a Real Estate Contracting Officer.

The Contractor shall:

- Provide Land Management services for the Hanford Site, in general and specific parcels, including day-to-day implementation of the CLUP, planning and management of General Purpose Facilities, and disposal of real property interests, such as easements, licenses, permits and leases.
- Perform management of real property at the Hanford Site for DOE and coordinate the use of real property among OHCs.
- Perform a range of real property activities, such as conducting land-use planning for areas and specific parcels; conducting reviews and integrating land-use requests for new facilities, infrastructure systems, land improvements, or change of land use; conducting land management activities, including day-to-day implementation of the CLUP; managing land-use requirements and beneficial reuse of land; and conducting real estate activities in the outgrant and disposal of real property or interests therein.
- Provide support for Hanford land conveyance activities in response to land transfer requests and within DOE's integrated project schedule. Analyze and make a formal recommendation to DOE to resolve Hanford Site boundary disputes.

C.4.9.1.1 Comprehensive Land-Use Plan

The Contractor shall implement the CLUP as directed or interpreted by DOE. The Contractor shall assess the need for updating the existing or developing new Area Management Plans and Resource Management Plans. In coordination with OHCs, the Contractor shall develop new plans and update existing plans where and when applicable and submit them to the DOE for approval. The Contractor shall maintain, implement, and distribute approved plans to OHCs. The Contractor shall develop and maintain a website

for communicating real property asset management and resource management information, including land use decisions, to OHCs.

C.4.9.1.2 Land-Use Planning

The Contractor shall perform land-use planning and management activities at the Hanford Site. The Contractor shall manage real property by reviewing property uses, reclassifying land use and facilities, investigating and characterizing land, monitoring misuse of property or encroachments, identifying orphan or unknown land uses (e.g., non-pristine land, hazards, and waste sites), dispositioning non-permitted activities, tracking and documenting land-use occurrences and activities, and providing support to DOE with required boundary line adjustments.

The Contractor shall:

- Perform land-use planning, Site evaluations, and manage excavation permits for the Hanford Site, and coordinate with OHCs who have ownership or landlord responsibility of specific assets.
- Ensure the integration of Site evaluation records and excavation permit records with the Stewardship Information Portal.
- Obtain from DOE and other Site contractors data and information necessary for performing Hanford Site land-use planning and management (e.g., input to the Land Management Tracking and Documentation System, participation in the Site Selection and Excavation Permit process, coordination of input into the ISAP, and input to the FYSP).
- Develop, maintain, and implement an integrated, up-to-date comprehensive Land Management Tracking and Documentation System that accomplishes the following:
 - Maps and documents land uses, including the Site constraints, identified deficiencies in land, identified radioactive materials, waste, and hazardous conditions of the real property, post cleanup waste sites and institutional control requirements as imposed by specific regulatory decisions, real property improvements, authorized basis, and other land-use occurrences and activities affecting land.
 - Maintains real property assets and identifies corrective actions for deficiencies in land use. Documents and tracks land-use deficiencies until corrective actions are completed.
- Support DOE in the correction of boundary encroachments (trespasses) and boundary line adjustments.
- Administer and manage the Site Selection and Excavation Permit process.
- Streamline and integrate procedures for project review, respecting NEPA and similar requirements where applicable.
- Provide early warning to projects about constraints or hazards associated with a Site, which could affect their design, Site infrastructure, or other operations.
- Establish and manage the Hanford Borrow Pit Management Program. Borrow source materials support Hanford Site cleanup by providing materials for road construction, backfill for remediation actions and materials for construction of caps for contaminated areas. Borrow Pit Management includes, but is not limited to:

- Providing cost-effective availability of borrow pit source materials on the schedule needed to support cleanup missions;
 - Managing borrow pits;
 - Updating the Industrial Mineral and Conservation Plan to account for the materials needed for cleanup;
 - Implementing the updated Industrial Mineral and Conservation Plan activities in the Contract Performance Baseline (CPB) and the Hanford Site Life Cycle Cleanup Program Baseline; and
 - Ensuring the integration of borrow pit data with the Stewardship Information Portal.
- Remove abandoned vehicles and mass dumpings (e.g., household garbage, tree stumps, building material, car parts, household furniture, and concrete).
 - Provide periodic surveillance of lands, wherein DOE has an MOA or other use agreement with a federal, state, or local agency (e.g., Vernita Bridge boat launch), and raise issues to the attention of DOE for resolution, if necessary.
 - Construct and place barricades, gates and short lengths of fencing, and install information signs and special signage on the Hanford Site, including signs to protect natural and cultural resources.
 - Conduct cadastral land surveys as directed by DOE.
 - Provide support for the development and administration of outgrants (easements, licenses, permits, and leases), transfers, and supporting utilization surveys, and plan for and administer property transfers on the Hanford Site.
 - Maintain real estate records identified by DOE, and ensure the integration of real estate records with the Stewardship Information Portal.
 - Prepare real estate reports for the Stewart B. McKinney – Vento Homeless Assistance Act, Title V: Identification and Use of Surplus Federal Property, (300 and 400 Areas complete).
 - Prepare real property assets for disposition, including potential reuse for other missions, when DOE identifies that a program mission is no longer required. Identify real property assets that are likely to be declared as excess in a 10 year planning horizon, and the anticipated current year of excess. This information shall be included in FIMS, the FYSP, and Site planning activities.
 - Coordinate and develop the FYSP and real property planning for the Hanford Site.
 - Assist DOE in the acquisition of leased space from the private sector, to include market surveys, advertising, appraisals, and lease preparations.
 - Develop information required for the Integrated Facilities and Infrastructure budget and ensure this information is included in FIMS and the FYSP, and support Hanford Site planning activities (e.g., Hanford Site Population forecasts).
 - Integrate and coordinate a Sitewide mitigation strategy, planning, and banking system to offset known impacts resulting from various projects.
 - Maintain the Stewardship Information Portal and ensure the integration of data from, but not limited to, the following data systems:

- Ecological Information System,
- WIDS and Wells,
- LTS Stewardship Information System,
- Real Estate Records,
- Borrow Pits,
- Site Evaluations,
- Site Excavation Permits,
- FIMS,
- CAIS,
- Hanford Structure Responsibility Assignment Matrix,
- Caretaker II,
- Chemical Information Tracking System, and
- Hanford Fire Occupancy Permits.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: None.

Interfaces: Federal, state, local agencies, and the MAPR (and/or its contractor) involved with the use or management of real property.

C.4.9.2 Site Access and Use

The desired outcome is to support DOE in the implementation of the interagency mechanisms for communicating and addressing land-use plans and proposals through the Hanford Access and Use Forum. The primary purpose of the Forum is to promote transparent, ongoing interagency coordination and collaboration on Hanford Site land uses, and provide informed and timely recommendations and advice to DOE.

Key Customer

- DOE

Scope and Requirements

The Contractor shall:

- Support DOE in the performance of comprehensive implementation and integration of Site access and use activities, while managing within the constraints of one of the nation's largest and most complex environmental cleanup projects.
- Assist in the development of land use strategies and activities consistent with the CLUP.
- Provide staff and resources to support DOE in meeting its objectives and obligations for access and use; this includes providing staff support for interactions with the Hanford Access and Use Forum.
- Identify current and upcoming issues of public interest related to DOE, design outreach strategies, create informational material, and facilitate interactions. Products and interactions will be approved by DOE in advance.
- Support management and development of Site Access and Use website.

- When requested by DOE, participate in meetings and briefings to update interested external parties on activities.
- Work with DOE to strategize, plan, arrange logistics for, and conduct visits to projects and facilities by external parties, as requested by DOE.
- Prepare Site Access and Use communication materials, such as presentations, fact sheets, specialized graphics and charts, large posters, and photography.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: The Contractor shall receive DOE approval prior to externally releasing information related to the Hanford Site.

Interfaces: None.

C.4.9.3 Post-Cleanup Surveillance and Maintenance

The desired outcome is effective and efficient stewardship of Hanford Site resources, which protects human health and the environment following remediation.

Key Customer

- DOE

Scope and Requirements

Elements within this work scope may include engineered and non-engineered institutional controls designed to contain or to prevent exposures to potential residual contamination and waste, surveillance activities, record-keeping activities, inspections, cap repair, maintenance of entombed buildings or facilities, maintenance of other barriers and containment structures, access control, and posting signs.

The Contractor shall:

- Provide for integrated planning of this work scope for the Hanford Site, and interim execution of these activities for portions of the Site assigned to the Contractor.
- Institutionalize these activities across the Site.
- Maintain a requirements-driven plan for these activities, that address, at a minimum, the elements listed below:
 - Responsibilities;
 - Protectiveness of remedies;
 - Protectiveness of the environment;
 - Transition from cleanup to S&M;
 - Communication (internal/external);
 - Information management;
 - Implementation; and
 - Interfaces with other programs.
- Maintain the safety basis and implement the controls specified in the *Final Hazard Categorization for Surveillance and Maintenance of 100 Area Reactor Buildings*. Changes to the document shall be provided for DOE approval.

- Maintain, update, and execute the S&M Plans for each segment or parcel of land, and each reactor Safe Storage Enclosure transitioned from the cleanup program to S&M. The Plan shall address activities (e.g., maintaining institutional controls required by ROD(s) record-keeping, inspections, groundwater monitoring, cap repair, maintenance of entombed buildings or facilities, maintenance of other barriers and containment structures, access control, and posting signs) necessary to ensure protection of human health and the environment following completion of remediation, disposal, or stabilization of a site or a portion of a site.
- Work with cleanup contractors, as their area transition and turnover packages are being developed, to ensure a smooth transition from the cleanup program into S&M. Each area transition and turnover package will be tied to a defined decision document (such as CERCLA Record of Decisions [ROD]) geographical area. The deliverable for each subsequent S&M Plan for DOE approval, shall be submitted in sequence with the cleanup contractor's area transition and turnover package, for a given parcel, segment, or facility. Transition shall also include development and submittal, to DOE, the necessary safety basis documentation, as required.
- Prepare and provide the necessary documentation, and participate as part of the integrated project team to transition cleaned-up areas from post clean-up surveillance and maintenance to the Office of Legacy Management.
- Maintain, update, and execute the Sitewide Institutional Controls Plan (TPA primary document) necessitated by applicable DOE-approved decision documents.
- Perform required institutional control assessments for portions of the Site assigned to the Contractor, and coordinate with DOE and OHCs to compile the results of the annual Hanford Sitewide Institutional Controls Assessment.
- Coordinate with DOE and OHCs to compile and prepare the Hanford Sitewide CERCLA 5 year reviews, comment response, interim documentation, and lessons learned, in accordance with Hanford Site CERCLA RODs, Hanford Site RCRA post-closure plans, and RCRA Permit corrective actions.
- Notify DOE of discoveries with the potential to affect human health and the environment, requiring significant remediation actions (for newly identified or previously closed waste sites) for those portions of the Site assigned to the contractors. DOE may direct the subsequent remediation, using the Contractor or OHCs.
- Maintain Hanford's Post-Cleanup Program website.
- Maintain and update a punch list of items that may or will require future DOE decisions for possible cleanup or other actions.
- Maintain, update and continue to populate the Stewardship Information System data management tool and support the integration with the Stewardship Information Portal.
- Assist DOE in integrated planning of Hanford Site activities, including performing studies and analysis of long-term needs, preparing plans and manuals, and ensuring the post-cleanup principles and requirements are reflected in the Hanford Site resources and area management plans.
- Coordinate with the MAPR (and/or its contractor) to provide access to Historic Sites for the purpose of planning and executing stabilization and interpretation projects, consistent with the MAPR mission for pre-Manhattan Project resources.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints:

- The majority of the River Corridor has been cleaned up, and a substantial portion of the Hanford Site geographical area is assigned to the Contractor. The Central Plateau portions of the Site are not planned to be transitioned to the Contractor at this time.
- The Hanford Site cleanup is currently scheduled to be completed around year 2060.

Interfaces: Federal and state regulators, the Hanford Advisory Board, Tribal Nations, and local municipalities for the purpose of regulatory compliance; the MAPR (and/or its contractor).

C.4.9.4 Tribal Nations

The desired outcome is to inform and involve the Tribal Nations as part of cleanup decision making processes to ensure that affected tribes can be involved early and often in activities.

Key Customers

- DOE
- Tribal Nations

Scope and Requirements

The Contractor shall:

- Designate a point(s)-of-contact within its organization to interact with the DOE.
- Ensure adequate and appropriate contractor management visibility and accountability within the Contractor's organization, and appropriate integration with DOE's American Indian Tribal Government interactions. Use existing DOE training programs or develop educational materials to train employees about affected tribes, their tribal governments, culture, treaty, and reserved treaty and other legal rights. If materials need to be developed, coordination shall occur with DOE.
- Communicate timely and openly with DOE and the federally recognized American Indian tribal governments, about the Contractor's proposed work that may involve tribal rights and interests (including, but not limited to, environmental monitoring and compliance, emergency operations and management, and local citizens' advisory boards). Include tribal governments through the development and implementation of proposed work. Notification is intended to allow for reasonable and timely comment by the American Indian Tribes prior to the preparation and execution of the proposed work.

DOE will coordinate with the Contractor on work identified in the MOUs with the CTUIR and the Wanapum Band of Indians, existing agreements made with tribes as part of mitigations for the NHPA, and future agreements made with tribes as part of mitigations for NHPA.

DOE may coordinate with the Contractor to support activities such as:

- Tribal revegetation and rehabilitation project action.
- Support of a tribal sampling and data management program.
- Implementation and oversight of management plans for tribal access and use of cultural protected areas.

- A tribal seed collection protocol.
- Collaboration with DOE to support tribal participation in post-cleanup S&M activities.
- Coordination with the DOE Tribal Program Manager and Tribal Specialist for tribally related activities and Government-to-Government consultations.

Boundaries, Constraints, and Interfaces: None.

C.4.9.5 Hanford Natural Resource Damage Assessment

The desired outcome is a program that produces integrated, compliant, and credible information that directly supports the Natural Resource Damage Assessment (NRDA).

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall provide:

- Technical, project management, and administrative support to DOE to meet its Hanford NRTC obligations, including performing studies and assessments, attending meetings, coordinating scientific information, retrieving document(s), and providing meeting summaries, as determined by DOE.
- Technical, project management, and administrative support to DOE associated with NRDA activities.
- Support of sampling and analysis for radiological release of selected lands, as determined by DOE.
- Interpretation of technical environmental data for the public, as directed by DOE.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: None.

Interfaces: NRTC members, their organizational staff and contractors.

C.4.10 Environmental Integration

The desired outcome of the Environmental Integration is to ensure the public, workers, and environment are protected by providing regulatory licensing, advice, and inter-contractor coordination on safety, health, quality, and environmental scope in support of an efficient, effective, and sustainable Hanford remediation.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall maintain corporate capability in the area of Environmental Integration with respect to DOE's mission, which includes cleanup, federal land, natural and cultural resources management, legacy management, and compliance with environmental requirements.

The Contractor shall provide integration services, including developing and managing a system where common elements of the work are identified for programs and Site Users, and the system and information are organized such that information is:

- Efficiently stored and retrievable;
- Avoids duplication of studies and field surveys; and
- Reduces redundancy of databases.

For the purposes of the Environmental Integration work scope, the term Sitewide may mean, depending on the context, a program, activity, study, or document for the Site, or individual activities, studies, or documents across the Site. DOE approved or funded activities off the Hanford Site may require environmental regulatory review and contractor support.

C.4.10.1 NEPA Planning and Program Support

The desired outcome is the capability to support and integrate DOE's NEPA program administration with OHCs.

Key Customers

- DOE
- OHCs
- PNNL

Scope and Requirement

The Contractor shall provide capability to support DOE in compliance with NEPA. The Contractor shall provide assistance to the Hanford NEPA Compliance Program upon request and as directed by DOE to:

- Develop and implement NEPA compliance policies and procedures.
- Develop and implement employee training.
- Assist with the preparation of NEPA documentation and related ecological and cultural resource studies.
- Develop and manage the records system, including for the NEPA AR.
- Provide integrated NEPA support and NEPA project tracking systems.

The Contractor shall ensure that NEPA review is initiated early in the planning process for actions defined below and fully integrated with work planning and control processes for:

- Adoption of official policy, such as rules, regulations, and interpretations;
- Adoption of formal plans that guide or prescribe alternative uses of federal resources, upon which future agency actions will be based;
- Adoption of programs, such as, actions to implement a specific policy or plan, or systematic and connected agency decisions allocating agency resources; and
- Approval of projects, such as, construction or management activities.

The Contractor shall:

- Provide applicable data, requested reviews and analyses, and prepare NEPA documents as required by DOE, prepare NEPA Review Screening Forms, and provide support, as requested, by DOE for Environmental Impact Statements (EIS) prepared by offsite contractors.
- Conduct the necessary fieldwork, studies, and prepare documentation for non-DOE NEPA actions when requested by DOE.
- Prepare State Environmental Policy Act (SEPA) documents as requested by DOE.

In coordination with OHCs, the Contractor shall:

- Develop guiding principles and procedures for an integrated administration of NEPA Planning and Program Support. OHCs are responsible for their contract responsibilities; however, the Contractor shall provide the integration of NEPA across the Hanford Site.
- Include in the Contractor's guiding principles and procedures an efficient, holistic and comprehensive approach for accomplishing functionally-related work that avoids segmentation of a plan or project into smaller components based on, for example, fiscal year funding.
- Provide a summary of the status of ongoing and expected NEPA projects for the coming year to DOE by November 30.
- Evaluate the impacts of new environmental laws, legislations and regulations related to NEPA or SEPA, and include an assessment of the cost impacts or savings associated with implementation and promptly notify DOE of results. The Contractor's assessment of new or proposed changes to NEPA or SEPA shall be provided to DOE.
- Provide a forecast for the Annual and Multi-Year Baseline of NEPA documents and planning strategies, expected for the coming year, to the DOE.
- Develop, manage, maintain, and perform an annual assessment of the official NEPA AR database to determine the adequacy of the AR to meet regulatory requirements. Propose corrective actions and a schedule for implementation, which shall be provided to DOE.

The Contractor shall conduct periodic reviews of NEPA compliance efforts at the policy and line levels as part of its performance assurance program. The Contractor shall not undertake on DOE's behalf an action that is subject to NEPA until DOE has notified the Contractor that DOE has satisfied applicable NEPA requirements.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: The Contractor provides support to DOE, at DOE's request, and may not make NEPA or SEPA commitments or represent DOE to others.

Interfaces: At the request of DOE, interfaces include DOE (for Pacific Northwest Site Office [PNSO]/PNNL activities performed on the Hanford Site), OHCs, other Hanford users, stakeholders, public, and tribes.

C.4.10.2 Cultural and Historic Resource Program

The desired outcome of the Cultural and Historic Resource Program is preservation and protection of DOE's cultural and historical resources, buildings, landscapes, and cultural protected areas in accordance with applicable laws, regulations, and agreements.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall:

- Develop, coordinate, integrate, and maintain the Cultural and Historic Resource Program.
- Protect Hanford Site cultural and historic resources.
- Coordinate associated reviews of federal undertakings conducted on the Hanford Site.
- Document potential effects and address real or potential impacts to cultural resources.
- Protect important cultural resources, and maintain and manage cultural resource records, and databases.

C.4.10.2.1 Program Development, Coordination, and Integration

The Contractor shall:

- Implement the Hanford Cultural Resources Management Plan and provide DOE an updated Plan every five (5) years.
- Integrate, maintain, and use cultural and historic resource documentation available to support determinations of the potential impacts of planned Hanford Site activities prior to initiating operations.
- Coordinate fieldwork and surveys with OHCs, Tribal Nations cultural representatives, and as needed, stakeholders and interested parties.
- Integrate cultural resource activities in coordination and communication with OHCs, Tribal Nations cultural representatives, and, as needed, stakeholders and interested parties. Maintain a long-term protection program at National Register of Historic Places (NRHP) and NRHP-eligible sites, buildings, landscapes, cultural protected areas, archaeological sites with human remains, and high-risk archaeological areas.
- Protect and minimize impacts to NRHP-eligible sites, archaeological sites with human remains, and high risk archaeological areas by Hanford Site activities.
- Evaluate and document impacts to protected resources.
- Coordinate, assess, and provide treatment and mitigation options to DOE, for sites and cultural resources impacted by natural or human actions. Develop and conduct Cultural Resources Awareness and Cultural Resources Management training for OHCs, and update and maintain the DOE Cultural Resources Training modules, as needed.
- As requested by DOE, provide input to the Report to Congress on the Federal Archeology Program.
- Assist the Hanford fire and emergency response activities by providing information on sensitive cultural areas, as needed.
- At CO direction, maintain and operate visitor center(s) and/or historic sites.

- Support cultural resource monthly meetings.

C.4.10.2.2 National Historic Preservation Act Section 106 Compliance

The Contractor shall:

- Develop criteria and guidance for determining when NHPA Section 106 reviews are necessary.
- Conduct NHPA Section 106 Reviews and associated draft agreement documents for DOE and OHCs.
- Comply with and track implementation and completion of NHPA Section 106 reviews and associated work conditions, MOAs, programmatic agreements, treatment plans, and cultural management plans.
- Provide a forecast for the Annual and Multi-Year Baseline of NHPA Section 106 reviews expected for the coming year to DOE.
- Prepare cultural resource information for NEPA documents or other publically releasable documents in compliance with confidentiality requirements in NHPA and the Archaeological Resources Protection Act (ARPA). Provide the information or document to DOE for review and comment.
- Prepare overarching cultural and historic resource program goals and objectives to support the DOE mission. Identify the strategic and tactical actions and activities necessary to achieve the identified cultural and historic resource program goals and objectives.

National Historic Preservation Act Section 110 Compliance

The Contractor shall:

- Protect and monitor cultural resources that are listed in or may be eligible for NRHP in a way that considers the preservation of their historic, archaeological, architectural, and cultural values.
- Support preservation of cultural resources including identification, evaluation, and nomination to the NRHP.

Native American Graves Protection and Repatriation Act Compliance

The Contractor shall:

- Support inadvertent discoveries of human remains procedures, as needed.
- Maintain and manage inadvertent discovery information.

C.4.10.2.3 Information Management for Cultural Resources

The Contractor shall:

- Maintain and manage Hanford Site cultural resource project and site files, reference library, databases, and digital archives, including the GIS database and records associated with Hanford collections and oral histories. Access and provide records in accordance with the procedure.
- Develop and manage a Sitewide Cultural Resources tracking system.
- Develop, integrate, implement and maintain an e-106 system for data sharing, security, and access, with robust data summary report-writing capabilities and the ability to generate automated correspondence.
- Develop and implement a procedure specifying data requirements and standards, QC measures, digitation of old records, curation and access protocols and data integration and updating strategies.

- Provide regular updates to support the Cultural and Historic Resource Program webpage.

C.4.10.2.4 Artifact Collections Transition

The Contractor shall transition DOE's archeological and historic artifact collections and associated records and materials to a contractor to be designated by DOE. The transition shall occur within six (6) months following CO notification.

Boundaries, Constraints, and Interface: None.

C.4.10.3 Environmental Compliance Support

C.4.10.3.1 Environmental Monitoring

The desired outcome of Environmental Monitoring is a program that provides environmental data for the Hanford Air Operating Permit (AOP), and specific project operation data that are credible, accurately characterized, compliant, and provide assurance to the workers and public that dose and risk from Hanford contaminants are well understood.

Key Customers

- DOE
- OHCs

Scope and Requirements

Environmental Monitoring provides multimedia environmental monitoring to measure the concentration of radionuclides and chemicals in environmental media (exclusive of the groundwater monitoring program) in order to assess the integrated effects of these materials on the environment and the public. Samples collected by environmental monitoring are analyzed for very low environmental concentrations of radionuclides and chemicals, including metals, cations, anions, semi-volatile and volatile organic compounds. This function focuses on routine operational and legacy releases from DOE facilities on the Hanford Site. Environmental monitoring is also used to detect and quantify unplanned releases and operational releases from non-DOE operations on or off the Hanford Site. The information produced by this program is published in an annual public report, and it is also integrated with environmental cleanup mission worker health assessment activities. This information may also be used by DOE in fulfilling its NRTC responsibilities and ensuring public safety at the Hanford Site and the MAPR.

The Contractor shall, through the IT governance process, procure or develop a data management system or systems that handle the Environmental Surveillance Program. High level requirements of the system include, but are not limited to:

- Utilize technology such as two-dimensional barcodes, radio frequency identifier tags, or other mechanisms to track samples throughout the process life cycle – from generation, field collection, lab analysis, and data reduction, to reporting.
- Assist in maintaining environmental monitoring findings.
- Allow data trending, plotting, and reporting.
- Provide a method to track sample costs on a per-media basis.
- Allow for improved cross-training, improved resource backup, and minimization of data entry and data maintenance errors.

The Contractor shall:

- Provide an environmental monitoring and reporting program that includes sample collection and analysis, contaminant containment assessments, and exposure/impact analyses.
- Conduct environmental monitoring and assess contaminant levels in the Hanford environs and nearby communities. The monitoring program shall include sampling of air, surface water, sediment, agricultural products, fish, and wildlife.
- Develop sample and characterization methods and apply these methods to determine individual organism health in species with high potentials for exposure and uptake of contaminants, in coordination with contaminate monitoring activities conducted through the Environmental Monitoring function.
- Notify DOE within one (1) working day of anomalous result.
- Notify DOE and the DOH within the AOP-specified timeframe of an air monitor being offline.
- Negotiate with DOE and the DOH the movement of AOP-listed air monitors.
- Perform cumulative assessments of onsite and offsite environmental impacts and offsite human health exposures from Hanford Site operations.
- Characterize the pathways of exposure to members of the public.
- Characterize the exposures and doses to individuals and to the nearby population.
- Estimate contaminant dispersal patterns in the environment.
- Measure the ambient external radiation levels in the environment.
- Detect and characterize releases from Hanford Site activities.
- Assess impacts and risks of Hanford contaminants on human health and the environment for the Annual Site Environmental Report (ASER), in support of Hanford cleanup activities as requested. Data and analyses shall be made available for Hanford risk assessment activities.
- Annually review the environmental monitoring program design and implementation, sample collection, sample analysis, data management, data review and evaluation, exposure assessment, and reporting requirements.
- Accurately calculate the potential radiation dose to humans, aquatic organisms, and terrestrial biota, hazard quotient for the evaluation of risk to biota, and the carcinogenic and non-carcinogenic risks to humans.
- Ensure that environmental monitoring data is made available for use in dose reconstruction efforts, Site characterizations performed in conjunction with ongoing Site environmental restoration activities, monitoring of biological impact, contaminant transport model verification, and support of groundwater/vadose zone integration initiatives, and safe public access to the Hanford Site and the MAPR and/or its contractor.
- Align the program with current operations and missions, focused on those contaminants having the greatest contribution to the potential offsite dose.

- Conduct environmental monitoring programs in an integrated fashion to preclude collection of duplicative environmental data.
- Ensure analytical capabilities include the measurement of radionuclides at very low environmental concentrations, as well as a complete list of non-radiological chemicals.
- Evaluate potential impacts to the biota in vicinity of DOE activities.
- Ensure early identification of, and support response to, potential adverse environmental impacts associated with DOE operations (such an impact may be the uncontrolled release of radioactive material by air dispersion).
- Prepare the annual Hanford Site Environmental Report that documents Hanford Site environmental compliance status, environmental conditions on and around the Hanford Site, and the potential offsite public radiological exposure resulting from Hanford operations.
- Prepare and coordinate the Hanford Site Environmental Monitoring Master Sampling Schedule.
- Ensure environmental monitoring related methods of sample collection, analysis, interpretation, and reporting are consistent across the Hanford Site to ensure usability, consistency and comparability of the data with other DOE Hanford projects and OHCs.
- Determine if sampling locations and analytics could contain proprietary or sensitive information and work closely with DOE to determine appropriate controls for the information.
- Align the environmental monitoring with the needs of the environmental cleanup, restoration, and assessment activities at the Hanford Site, since the information generated by the program is extensively used by Site contractors.
- Conduct radiological surveys of the parcels of land assigned to the MAPR, for unforeseen reasons and abnormal events, to ensure no inadvertent migration of contamination onto those parcels, and to take whatever action is deemed necessary by DOE to continue to protect the public and the environment.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints:

- The Contractor shall provide notice to DOE prior to meeting with non-DOE parties. The Contractor shall not make commitments for the Government.
- The MAPR (and/or its contractor) is responsible for radiological surveys within the B-Reactor and controls necessary for protection of the public, workers, and the environment.

Interfaces: Regulators, stakeholders, DOH, MAPR (and/or its contractor), and the Tribal Nations to share and interpret environmental surveillance data.

C.4.10.3.2 Ecological Monitoring and Compliance

The desired outcome of the Ecological Monitoring and Compliance function is the identification and documentation of Hanford Site Biological Resource Management Plan levels 1, 2, 3, 4, and 5 resources. Monitoring of resources within these categories will be prioritized based on data needs and potential for impacts from activities on the Hanford Site. Monitoring shall be sufficient to identify and document actual and potential impacts of Hanford operations on natural resources; and to promote planning for the

long-term conservation and protection of Hanford Site natural resources as the fiduciary of edaphic, rock, mineral, water, air, geomorphologic, viewscape, cultural, plant, animal, cryptogamous, and other natural resources.

Key Customers

- DOE
- OHCs
- PNNL

Scope and Requirements

The Contractor shall:

- Conduct and document ecological monitoring and compliance reviews to ensure environmental compliance for Hanford Site related actions that have the potential for affecting the ecological environment.
- Maintain, update, and implement the Hanford Site Biological Resources Management Plan, Threatened and Endangered Species Management Plan, and Bald and Golden Eagle Site Management Plan.
- Provide a forum to obtain feedback from those to whom ecological reviews are provided and modify the ecological review process for continuous improvement.
- As approved by DOE, conduct and document monitoring of priority habitats and species using a graded approach. Document the status of sensitive species found or potentially found on the Hanford Site.
- Assess impacts to ecological resources from activities on Hanford and legacy contaminants in the environment and evaluate the cumulative impacts of activities on these resources. If impacts to ecological resources that have not been previously reported are identified, provide DOE a written summary of those impacts within five (5) working days.
- Conduct ecological reviews as requested by Hanford Site users, and identify and quantify ecological impacts to the extent practicable.
- Characterize and define changes or trends in the condition of Hanford ecological resources that may result from causes external to the Hanford Site.
- Define and map significant habitats, species distribution, floodplains and wetlands, for use in land-use planning, ecological risk assessment, and mitigation action planning.
- Perform surveys and monitor compliance with applicable requirements during the appropriate times of the year to document changes to protected ecological resources.
- Maintain an integrated data system on the regulatory status and distribution of species and habitats of concern on the Site. The data will include information necessary for tracking reviews, as well as a record of the field data necessary to evaluate impacts and compliance needs.
- Assist the Hanford fire and emergency response activities by providing information on sensitive species and habitat for purposes of controlled burns, establishing pre-fire firebreaks, and initial attack fire lines.

- Support efforts to determine if injuries have occurred to Hanford natural resources, including threatened and endangered species or populations on the Hanford Site and the Columbia River, as determined by DOE. Injuries are defined by the CERCLA Natural Resource Damage Regulations and Guidance.
- Integrate bird takes among the contractors for the Sitewide Migratory Bird Treaty Act (MBTA) Compliance Program, which is the single point-of-contact with the USFWS, who manages a single, Sitewide MBTA take permit for DOE.
- Serve as the single point-of-contact for Sitewide best management practices for protection of fish, wildlife, and habitats.
- Provide ecological reviews and analyses, at DOE's request, for NEPA efforts.
- Provide administrative and technical support to NRTC activities.
- Provide, to DOE, a forecast of annual and multi-year baseline for ecological reviews (including for Endangered Species Act [ESA] and other environmental protection laws) expected for the coming year.
- Coordinate an annual review with DOE counterparts on the suite of ecological compliance procedures and documents to determine if they need to be reviewed or revised in the next fiscal year.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints:

- DOE is the permittee for the MBTA take permit.
- DOE is the Trustee for Natural Resources.

Interfaces: USFWS, Washington Department of Fish and Wildlife, The Nature Conservancy, Washington State Natural Heritage Project, and universities.

C.4.10.3.3 Biological Controls

The desired outcome of the biological controls service is effective control and minimization of noxious weeds, industrial weeds, other vegetation, and animal pests to ensure the protection of Hanford Site workers and the public from contamination spread by biological vectors and to revegetate areas where erosion can expose the environment, workers, and the public to blowing dust or contamination.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall:

- Provide an effective Hanford Sitewide biological control program that complies with ESH&Q principles.
- Control noxious weeds, industrial weeds, other vegetation, and animal pests for the purposes of protecting employees, the public, and Hanford Site cultural and environmental (including biological) resources.

- Maintain facilities, roadways, fence lines, waste sites, radiological areas, and tank farms free of windblown tumbleweeds; perform spray operations and related activities in radiological areas; perform tumbleweed burning activities; post unidentified underground radioactive material areas as discovered during biological control operations; and perform animal control operations (fly traps, rebaiting).
- Respond to Hanford Site animal control calls, coordinate biocide applications at Site facilities, and provide equipment/technical expertise (to assist with the road maintenance function) in liquid de-icing activities during winter months, as needed.
- Provide technical coordination on aerial herbicide applications for noxious weed and selective weed control and collect native plant seeds for use in revegetation plots. Areas bladed beyond the normal control swath shall be treated with selective and nonselective herbicides.
- Maintain and provide records and reports applicable to biological controls, including ESH&Q documentation, CM, performance trending, lessons learned feedback, correction action tracking, self-assessment activities, and coordination with DOE, state, and local authorities regarding ESH&Q matters.
- Revegetate waste sites and operations areas where erosion could compromise worker safety and ongoing Site operations.
- Maintain and update the Integrated Biological Control Program Plan.

Selective and non-selective herbicide applications shall be scheduled for applications during the year, depending on vegetation growth on radioactive and waste sites.

Waste and radiation sites shall include a 15 ft. buffer zone outside the affected zone to control deep-rooted vegetation.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: WAC 16-233-215, *Worker Protection Standards*, pesticide labels, and 40 CFR 170.130, *Pesticide Safety Training for Workers*. Pesticide safety training for workers are the standards for pesticide applications. The purpose of these requirements is to protect workers and pesticide handlers from exposure to pesticides.

Interfaces: Benton, Grant, and Franklin County Noxious Weed Control Boards, USFWS, and U.S. Army Corps of Engineers for coordination of biological control activities near the Hanford Reach National Monument, and the Washington State Department of Agriculture Pesticide Management Division, EPA, DOH, BPA, and Ecology.

C.4.10.4 Environmental Regulatory Management

The desired outcome is integrated Sitewide environmental products and services that enable timely and compliant project execution of this Contract and in coordination with other affected DOE contractors.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall:

- Develop within one (1) year after NTP, an Integrated Sitewide Environmental Protection and Compliance Plan for DOE approval.
- Have two (2) primary responsibilities in the area of Environmental Regulatory Management:
 - As DOE’s SME, Sitewide management, planning, administration, integration, permitting, and compliance, in coordination with OHCs; and
 - Contractor-specific work scope for environmental permitting and compliance.
- Ensure that its activities are closely aligned with the needs of the DOE as a federal land manager, as a CERCLA Potentially Responsible Party (PRP), and as a RCRA permittee (WA78900008967 Hanford Facility Dangerous Waste Permit), and as a RCRA permittee conducting corrective actions to clean up past practice hazardous waste contamination.
- Obtain concurrence from other affected OHCs for Sitewide environmental documents. The Contractor is not responsible for directing technical work of OHCs. The Contractor is responsible for obtaining work scope unit-specific permit modifications and working with DOE to obtain time extensions from the regulators for permit modifications, as required. OHCs are responsible for working with DOE to obtain their own unit specific permit modifications and time extensions from the regulators, in coordination with the Contractor, as DOE’s integrating contractor.

C.4.10.4.1 Sitewide Environmental Management System and Sustainability Implementation

- In conjunction with OHCs and DOE, the Contractor shall develop a Sitewide Environmental Management System (EMS) Program Management Plan to address the Sitewide elements of EMS that implement and track the progress of meeting the annual goals and objectives as promulgated in the annual DOE-HQ Strategic Sustainability Performance Plan. The Contractor shall use the current reporting mechanism for reporting EISA 432 Covered Facilities (for example, DOE Sustainability Dashboard).
- The Contractor shall coordinate with OHCs in the areas of the Site Sustainability Plan that include Sustainability scope.
- The Contractor shall use the FedCenter EMS scorecard format to develop Sitewide metrics in coordination with the Annual Site Sustainability Plan, and report performance for EMS-related programs (e.g., pollution prevention, chemical management, affirmative procurement, Green Buildings construction, alternative energy use, and water conservation) in their respective reporting venues (e.g., specified databases or paper reports), in the ASER, and on the Annual FedCenter EMS Scorecard report.

C.4.10.4.2 Site-wide Enforcement Actions and Compliance Issues

As DOE’s SME integrator for the following Sitewide Enforcement Actions and Compliance tasks, the Contractor shall:

- Enforcement Actions:
 - Track, trend, and evaluate Sitewide enforcement actions.

- Coordinate an integrated response when the enforcement action affects, or has the potential to affect, more than one contractor or DOE field office.
- Develop a protocol, in conjunction with OHCs, for managing and coordinating enforcement inspections on a Sitewide basis.
- Compliance:
 - Track, trend, and evaluate Sitewide compliance issues (e.g., Notices of Violation [NOV], Potential NOV, High Priority Violations, and Notices of Concern).
 - Coordinate an integrated response when the compliance issue affects more than one contractor or DOE field office.
- Inspection Actions:
 - With input from, and in collaboration with OHCs, track regulatory inspections conducted and planned at the Hanford Site.
 - The Contractor shall provide data (automated or written) on inspections and regulatory actions completed, additional items requested by the inspector, initiated responses, and closure of the inspection at the Hanford Site (or offsite) due to a Hanford action.
 - The Contractor shall trend and evaluate Site-wide inspections.

C.4.10.4.3 Sitewide TPA Technical Support

In coordination with OHCs, the Contractor shall:

- Provide DOE technical and regulatory analysis to support DOE in its role of managing the TPA for the Hanford Site.
- Develop, maintain, and implement TPA processes and procedures (e.g., public meetings, change control, and dispute resolution).
- Maintain milestone status and performance statistics and provide search utility capability.
- Track TPA milestones and coordinate Milestone Reviews.
- Coordinate the Inter-Agency Management Integration Team and other TPA-related meetings, as requested (e.g., monthly Project Manager Meetings, including issuing agendas and preparing meeting minutes).
- Assist DOE in dispute resolution.
- Develop and maintain a Sitewide TPA process for preparing Remedial Action Completion Reports and Corrective Measures Reports and requesting regulatory approval of waste site remediation, through a certificate of completion, in compliance with TPA Sections 7.3.10 and 7.4.4.
- Obtain advance concurrence, or approval (as required), from DOE and coordinate with other affected OHCs.

C.4.10.4.4 Hanford Site Administrative Record and Information Repositories

The Contractor shall establish, manage, and maintain integrated Hanford Site AR and PIRs that meet applicable requirements of the TPA (e.g., CERCLA, RCRA, and Administrative Procedure Act), and

other legal and regulatory requirements applicable to Hanford's environmental remediation and permitting programs.

In coordination with OHCs, the Contractor shall:

- Establish and maintain procedures for management/administration of the Hanford Site AR.
- Establish and maintain a document review process to screen documents to be included in the Hanford Site AR.
- Index, manage, retrieve, and make available to the public Hanford Site AR records and data.
- Maintain a current, complete, easily searchable, and retrievable electronic Hanford Site AR database. Maintain the PIRs in Portland, Seattle, Spokane, and Richland. The CERCLA documents include Remedial Investigations, Feasibility Studies, RODs, Remedial Design/Remedial Action Work Plans, and Sampling and Analysis Plans. The PIRs are under the purview of the Hanford Public Involvement Plan that serves as the overall guidance document for public participation and outreach activities at the Hanford Site.

The Contractor shall:

- Integrate its environmental permitting and regulatory compliance activities with the Hanford Sitewide permitting and compliance framework by annually submitting to DOE for approval an environmental compliance and protection plan or an equivalent database solution (such as the Dynamic Object Oriented Requirements Management System or Solution).
- Manage Contractor-assigned facilities and activities to ensure identification of and compliance with applicable federal, state, and local environmental regulations, orders, and permits.
- Provide appropriate environmental data for Contractor-assigned facilities to support Hanford Site assessments, and for use in the Contractor's preparation of Hanford ASERs.
- Respond to Contract-related NOV's, Notice of Concerns, and other issues, as necessary.
- Obtain and manage AR documents generated by the Contractor as a result of permitting or closure of Hanford Treatment Storage Disposal units, recycling facilities, or as a result of CERCLA pre-remedial, remedial or post-remedial actions that are required by the TPA, and other legal requirements associated with environmental permitting.
- Evaluate the impacts of new environmental laws, legislations and regulations, including state and local requirements, and include an assessment of the cost impacts or savings associated with implementation and promptly notify DOE of results.
- Collect environmental analytical data for the Contractor-assigned areas to support regulatory decisions as directed by DOE.
- Coordinate with DOE and the regulators to develop an optimum regulatory approach for work under this Contract.
- Perform assessment of the Hanford Site AR to determine the adequacy of the AR to meet regulatory requirements and, as needed, propose corrective actions and a schedule for implementation.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints:

- The initial Hanford RCRA Permit became effective in September 1994, and is comprised of two (2) portions: a Dangerous Waste Portion, issued by Ecology, and a Hazardous and Solid Waste Amendments Portion, issued by the EPA, Region 10. The Dangerous Waste Permit is issued to DOE as the owner/operator, and to its contractors, as co-operators. DOE will sign the Hanford RCRA permit as “Owner/Operator” and the Contractor shall sign the RCRA Permit as “Co-operator” for those RCRA facilities assigned by Contract. This Permit is currently in the renewal process.
- The Hanford AOP was renewed on April 1, 2013 and will be in effect for five (5) years; renewal is expected. During the permit renewal process the existing AOP remains in effect.
- DOE will operate as an “Owner” in coordination with the regulators to reach agreement on Contractor-prepared regulatory and supporting documentation, and on innovations that require changes to the regulatory approach.

Interfaces: Multiple DOE offices for activities performed on the Hanford Site, DOE BPA, DOE Office of Legacy Management, OHCs, regulators, and, at the request of DOE, stakeholders, concerned public, and the Tribal Nations.

C.4.10.5 Environmental Mitigation Strategy and Planning

The desired outcome is to have centralized, Sitewide mitigation planning and implementation that is efficient and cohesive.

Key Customers

- DOE
- OHCs
- PNNL

Scope and Requirements

The Contractor shall:

- Establish and implement a Sitewide mitigation strategy.
- Have two (2) primary responsibilities in the area of Mitigation Strategy and Planning:
 - Sitewide mitigation strategy planning in coordination with OHCs; and
 - Implementation, coordination, and tracking of mitigation action plans.
- Coordinate with affected OHCs, other applicable federal agencies, and outside entities as necessary.
- Develop an integrated NEPA, CERCLA, RCRA, and NHPA Sitewide Mitigation Strategy Planning and Implementation program that includes, but is not limited to, NEPA, ESA, MBTA, Bald and Golden Eagle Protection Act, Clean Air Act (CAA), CERCLA, RCRA, NHPA, American Indian Religious Freedom Act, and the Clean Water Act. The integrated program shall facilitate a balance between the ongoing Hanford Site mission elements and the omnipresent trustee stewardship obligations:
 - The strategy for mitigation shall consider cohesiveness and landscape connectivity with adjacent areas by coordinating with other federal agencies and groups, such as the USFWS, and DOE’s Office of Legacy Management.

- Develop, implement, and maintain procedures to enable Hanford Site projects to anticipate and plan for mitigation needs via early identification of mitigation requirements.
- Develop, implement, and maintain a procedure for implementing consistent, cost-effective mitigation actions through a Sitewide mitigation banking system.
- Conserve Hanford's natural resources while facilitating a balanced development and consideration of the Hanford Site mission.
- Monitor the effectiveness of the mitigation actions and adapt them as necessary. Assist DOE in preparing Mitigation Action Plans, when necessary.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: None.

Interfaces: NRTC members, tribal liaisons, USFWS, and National Parks Service.

C.4.10.6 Environmental Permits and Compliance

The desired outcome of the Environmental Permitting Management function is integrated Sitewide environmental permitting products and permitting services that enable timely and compliant project execution of this Contract and other affected DOE contractor's work scope.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall establish an environmental permitting program that is compliant with applicable laws, regulations, DOE directives, and the terms of this contract. For permitting activities the Contractor will be the coordinating contractor. For permits, the Contractor shall have two (2) primary responsibilities in the area of Environmental Permit Management:

- As DOE's SME, Sitewide management, planning, administration, integration of permitting, and permit compliance in coordination with OHCs; and
- Contractor-specific work scope for environmental permitting and permit compliance.

The Contractor shall ensure that its permitting activities are closely align with the needs of the DOE as a land management trustee, as a CERCLA PRP, as a RCRA Permittee, as a Title V CAA Permittee, and as a small municipality equivalent that has attendant infrastructure and permitting requirements.

The Contractor shall obtain concurrence from other affected OHCs for Sitewide environmental permits and permitting strategy documents. The Contractor is responsible for obtaining scope unit specific permit modifications and working with DOE to obtain time extensions from the regulators for Contractor-permitted scope as required. OHCs are responsible for working with DOE to obtain their own unit specific permits, permit modifications, and time extensions from the regulators.

RCRA regulator inspection actions, including regulatory permit compliance inspections and resulting compliance actions, will be coordinated through the Contractor as DOE's planning and administrating integrating contractor.

Integrated Sitewide Environmental Permits and Licenses – Maintenance, Application, and Reporting

In coordination with OHCs, the Contractor, with DOE concurrence, shall:

- Develop guiding principles and procedures for a consistent administration of regulatory permitting interfaces.
- Prepare and maintain appropriate procedures for implementing Sitewide environmental permits, licenses, and related reports.
- Coordinate, prepare, obtain as required, and maintain Sitewide permits and licenses.
- Obtain from DOE and OHCs data and information necessary for developing required Sitewide Environmental Permitting Reports to include compilation and integration of environmental monitoring data from operations and activities under the Contractors' control and from OHCs.
- Compile and produce environmental permitting data and provide an annual forecast of expected permitting activities and a forecast of operations/operational effluents on a Sitewide basis to ensure Sitewide limits (e.g., annual radiological dose, total volume of permitted effluent discharges) are integrated, and are not at risk of being exceeded.
- As requested by DOE, the Contractor, as an SME, shall assess environmental permitting documents from other governmental organizations or other DOE contractors to ensure the documents meet GPO production standards, environmental permitting standards, regulatory quality standards, and content requirements.
- Develop Sitewide metrics for DOE approval and report performance for Sitewide permitting activities.
- Integrate the Contractor's environmental permitting and regulatory compliance activities with the Hanford Sitewide permitting and compliance framework, by annually submitting to DOE, for approval a Contractor environmental permitting, compliance, and protection plan.
- Manage Contractor-assigned facilities and activities to ensure identification of and compliance with applicable federal, state, and local environmental regulations, orders, and permits.
- Respond to Contractor-related permit violations such as NOV's, Notice of Concerns, and other issues, as necessary.
- Evaluate the impacts of new environmental laws, legislations, and regulations, including state and local requirements, include an assessment of the cost impacts or savings associated with implementation of permitting requirements, and promptly notify DOE of the issues.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints:

- The Contractor is not responsible for directing technical work of OHCs.
- The initial Hanford RCRA Permit became effective in September 1994, and is comprised of two portions:
 - a Dangerous Waste Portion, issued by Ecology; and

- a Hazardous and Solid Waste Amendments Portion, issued by the EPA, Region 10.
- The Dangerous Waste Permit is issued to DOE-RL as the owner/operator, and to its contractors, as co-operators. DOE will sign the Hanford RCRA permit as “Owner/Operator” and the Contractor shall sign the RCRA Permit as “Co-operator” for those RCRA facilities assigned by Contract. This Permit is currently in the renewal process. It is known as:
 - Common Name: The Hanford Sitewide Permit Revision 8C;
 - Permit Number: WA7890008967;
 - Permit Modification Number: 8C.2016.Q4.
- The Hanford AOP was renewed on April 1, 2013 and will be in effect for five (5) years (during the permit renewal process the existing AOP remains in effect). It is known as:
 - Permit Number: 00-05-006 Renewal 2, Rev B
 - Issue Date: July 28, 2016
 - Effective Date: August 1, 2016
 - Expiration Date: March 31, 2018
- There are several extant Waste Water Discharge Permits. They are known as:
 - ST-4500 200 Area Effluent Treatment Facility, Permit Number: ST0004500
 - Issue Date: December 15, 2014
 - Effective: January 1, 2015
 - Expiration Date: December 31, 2019
 - ST-4502 • 200 Area Treated Effluent Disposal Facility, Permit Number ST- 4502
 - ST-4511 • Miscellaneous Streams (State Permit Number ST-4511)
 - ST-0045514 200 West Area Evaporative Sewage Lagoon
- There are two sand and gravel permits associated with ORP construction:
 - Concrete Batch Plant • WAG-50-5180/Concrete Batch Plant
 - Pit 30 Quarry • WAG-50-5181/Pit 30 Quarry
- There are Group A Public Drinking Water Systems:
 - PWSID 00100 Energy, Department of/200W, 189 connections, Effective Date 11-13-1990
 - PWSID 00177 Energy, Department of/100K, 5 connections, Effective Date 11-13-1990
 - PWSID 41840 Energy, Department of/300 Area, 20 connections, Effective Date 5-1-1988
 - PWSID 41947 Energy, Department of/400 Area, 5 connections, Effective Date 5-1-1988
- There are Group B Public Drinking Water Systems:
 - WSID 001761 Energy, Dept. of/100D
 - WSID 001782 Energy, Dept. of/251
 - WSID 001806 Energy, Dept. of/609 Fire Station
 - WSID 001827 Energy, Dept. of/6652C Observatory
 - WSID 00183Q Energy, Dept. of/Training Academy
 - WSID 001848 Energy, Dept. of/Yakima Barricade
 - WSID 04480U Energy, Dept. of/182B
 - WSID AB046E Energy, Dept. of/Wye Barricade

- DOE will operate as an “Owner” in coordination with the regulators to reach agreement on Contractor-prepared regulatory and supporting documentation, and on innovations that require changes to the regulatory approach.

Interfaces: DOE (RL, ORP, PNSO, BPA, Office of Legacy Management), OHCs, Regulators, stakeholders, concerned public, and the Tribal Nations (as requested by DOE).

C.4.10.7 Natural Phenomena Monitoring

C.4.10.7.1 Meteorological and Climatological Services

The desired outcome of the Meteorological and Climatological Services function is a reliable monitoring system producing sufficiently accurate and timely weather forecasts that enable safe conduct of routine activities and emergency response.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall:

- Maintain and operate the Hanford Meteorological Monitoring system and shall provide easily retrieved and understood real-time meteorological data for DOE and OHCs.
- Support emergency response activities with current meteorological data and forecasts, in the event of an accidental radiological or chemical release.
- Operate and maintain the Meteorological and Climatological Services computer network.
- Provide weather forecasts in support of routine and special Site operations to include general weather, telemetry, adverse weather, and special forecasts, as required.
- Detect adverse weather that may affect safety of Site workers (strong winds, thunderstorms, extreme cold, and snow events) and provide timely communication of this information to Site contractors and DOE.
- Monitor/report heat stress data and provide this information to Site contractors in support of Site cleanup activities, when required.
- Operate the Met Viewer data display system and Air Pollutant Graphical Environmental Modeling System interactive transport and diffusion computer model.
- Produce data for annual potential radiological exposure assessment.
- Produce data for interactive atmospheric models in support of air permitting activities.
- Ensure data availability for the annual estimation of potential public radiation exposure.
- Ensure that comprehensive climatological data records are maintained for use in a variety of other applications, such as post-accident analysis, dose reconstruction, building design, and environmental impact assessment.
- Maintain historical climatological database to respond to special requests in support of site activities.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: Regional and national organizations outside the Hanford Site may request meteorological and climatological information or support from the Contractor. In this event, the Contractor shall contact the DOE for guidance.

Interfaces: National Weather Service, as necessary, to share meteorological information and provide a complete forecast.

C.4.10.7.2 Seismic Monitoring

The desired outcome of the Hanford Site Seismic Monitoring is a service that provides an uninterrupted collection of high-quality raw seismic data from the Hanford Seismic Network, located on and around the Hanford Site, and the Eastern Washington Regional Network.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall:

- Provide a Hanford Site Seismic Monitoring function consisting of an uninterrupted collection of high-quality raw and processed seismic data from the Hanford Seismic Network for DOE and OHCs. This function shall have the capability to locate and identify sources of seismic activity and monitor changes in the historical pattern of seismic activity at the Hanford Site.
- Compile, archive, and publish the data for use by OHCs involved in waste management, NPH assessments, and engineering design and construction.
- Issue an annual catalog of earthquake activity on and near the Hanford Site and special-interest bulletins on local seismic events. The annual catalog shall include geologic interpretation of the sources of the earthquakes.
- Provide interpretations of seismic events from the Hanford Site and vicinity. Locate and identify sources of seismic activity, monitor changes in the historical pattern of seismic activity at the Hanford Site, and manage and permanently archive earthquake process data.
- Maintain an archive of seismic data from the Hanford Seismic Network, and records for the seismic sensor and relay sites, and make readily accessible to OHCs.
- Provide assistance to the Hanford Site Emergency Operations function and Hanford Site facilities in the event of a significant earthquake on the Hanford Site.
- Operate and maintain the seismic network (sites and equipment).
- Maintain land agreements with offsite network sites, provide data analysis, update software and provide seismologist support.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: None.

Interfaces: U.S. Geological Survey.

C.4.10.8 Radiological Site Services

RSS is a Hanford Site service provided by the Contractor. RSS is a fully integrated and documented set of radiological support programs that provides the technical support, dosimetry, data, and records necessary to demonstrate compliance with required radiological monitoring and to verify the adequacy of Site radiological control programs in protecting the health and safety of workers, the public, and the environment.

RSS includes the following four (4) components: Hanford External Dosimetry Program (HEDP), Hanford Internal Dosimetry Program (HIDP), Hanford Radiological Instrumentation Program (HRIP), and HRRP.

Scope and Requirements

The Contractor shall:

- Provide RSS, as appropriate, for OHCs and subcontractor employees performing hazardous work that may expose workers, the public, or the environment to radiological hazards.
- Maintain and implement the RSS Strategic Plan (RSS Master Plan).

C.4.10.8.1 Hanford External Dosimetry Program

The desired outcome of the HEDP is external dosimetry services that provide demonstrated compliance with the external radiation monitoring requirements of key customers, and provide technically sound, defensible data for determining adequacy of Site radiological control programs in protecting the health and safety of workers, the public, and the environment.

Key Customers

- DOE
- OHCs

Scope and Requirements

The HEDP shall be designed and implemented based on the expressed types and quantities of external dosimetry services required by key customers.

The HEDP shall be managed in a fully-integrated manner with other RSS programs.

The Contractor shall:

- Provide the staffing and personnel required to perform HEDP services, including the preparation, distribution, processing, and documentation of external dosimetry (including associated dosimetry processing instrumentation and software).
- Provide, distribute, and process dosimeters, including personnel whole body, extremity, and accident dosimeters, area monitoring and criticality dosimeters, and environmental dosimeters.
- Maintain U.S. Department of Energy Laboratory Accreditation Program accreditation in external exposure categories required by customers.
- Provide the capability for priority processing of personnel dosimeters and onsite emergency processing of personnel dosimetry.

- Provide the results of processing of personnel dosimeters to the HRRP for inclusion in personnel radiation exposure records, including shallow dose equivalent, eye dose equivalent, deep dose equivalent, and neutron dose equivalent, according to the type(s) of dosimeter.
- Develop and maintain a technical basis document(s) for the HEDP.
- Provide representation to the Hanford Personnel Dosimetry Advisory Committee and necessary logistical and administrative support for the Committee.
- Provide and maintain technical documentation and specifications of the performance characteristics of dosimeters and the algorithms used for processing these dosimeters. This includes providing technical support to confirm that these performance characteristics and processing algorithms remain appropriate to meet customer monitoring requirements.
- Provide prompt notification to the applicable customer point-of-contact in the event of high, abnormal, missing, or anomalous dosimeter results. This includes providing technical support in investigating high, abnormal, missing, or anomalous dosimeter results and determining appropriate exposure or dose values.
- Develop and maintain systems for tracking the status of dosimeters that have been issued, for providing routine, periodic reports on the status of results of dosimeter distribution and processing, maintaining appropriate dosimetry records for personnel in a special or unique status, such as a declared pregnant worker, or on a radiological work restriction, and routine updating of radiological access control systems.
- Maintain a 24/7 point-of-contact for onsite radiological incidents.
- Establish an HEDP point-of-contact as the primary focus for routine service requests or information. Special requests requiring a commitment of additional resources shall be approved by DOE prior to fulfilling the request.
- Interface with customers to determine specific external dosimetry needs and requirements, to provide requested technical support, and to provide status and results of external dosimetry distribution and processing.
- Notify DOE of potentially abnormal circumstances or special service requests, such as multiple assignment of the same dosimeter, dosimeters worn by the wrong worker, dosimeters taken apart by workers, and other unusual events.

Boundaries, Constraints, and Interfaces: None.

C.4.10.8.2 Hanford Internal Dosimetry Program

The desired outcome of the HIDP is internal dosimetry services that provide demonstrated compliance with the internal radiation monitoring requirements of key customers, and provide technically sound, defensible data for determining adequacy of Site radiological control programs in protecting the health and safety of workers, public, and the environment.

Key Customers

- DOE
- OHCs
- Hanford Site Subcontractors

Scope and Requirements

The HIDP shall be designed and implemented based on the expressed types and quantities of internal dosimetry services required by key customers, including the capability of performing ~7,000 each in vitro and in vivo bioassays each calendar year. The HIDP shall be managed in a fully integrated manner with other RSS programs.

The Contractor shall:

- Perform HIDP services, including the preparation, distribution, processing, and documentation of in vitro excreta samples and results and in vivo measurements and results, including maintaining associated software and in vivo measurement instrumentation.
- Maintain accreditation in internal exposure categories required by customers.
- Provide the results of HIDP measurements and analyses to the HRRP for inclusion in personnel radiation exposure records.
- Develop and maintain a technical basis document(s) for the HIDP, including the technical bases for evaluating radiological intakes and bioassay results. Update the HIDP as necessary to ensure such evaluations incorporate the latest International Commission on Radiological Protection (ICRP) biokinetic and human physiology models (for example, ICRP Publication 66, *Human Respiratory Tract Model for Radiological Protection*).
- Provide representation to the Hanford Personnel Dosimetry Advisory Committee and necessary logistical and administrative support for the Committee.
- Maintain the capability to perform in vivo measurements on an emergency basis within two (2) hours of notification.
- Provide guidance and technical input regarding medical intervention and recommend appropriate follow-up bioassay.
- Provide technical support in determining type(s) and frequency(ies) of bioassays to meet specific customer requirements.
- Perform routine scheduling for in vivo and in vitro bioassays, including developing and maintaining a system for home delivery and pickup of bioassay kits.
- Develop and maintain a system for evaluating and implementing waivers for routine bioassays.
- Provide for analysis of in vitro excreta samples and provide technical oversight of the excreta analysis laboratory to include conducting a QC oversight program independent of the excreta analysis laboratory's in-house QC program.
- Provide prompt notification to the applicable customer point-of-contact in the event of positive, abnormal, or anomalous bioassay results. This includes providing technical support in investigating such positive, abnormal, or anomalous bioassay results and determining appropriate dose values.
- Develop and maintain systems for tracking and providing routine, periodic reports on the status and results of bioassays that have been scheduled, maintaining appropriate records for personnel in a special or unique status, such as a declared pregnant worker or on a radiological work restriction, and routine updating of radiological access control systems.

- Maintain a 24/7 point-of-contact for onsite radiological incidents.
- Establish an HIDP point-of-contact as the primary focus for routine service requests or information.
- Interface with customers to determine specific internal dosimetry needs and requirements, to provide requested technical support, and to provide status and results of internal dosimetry scheduling and processing.
- Notify DOE of special service requests, such as development of a new bioassay protocol, request to use an atypical analytical model, and other unusual requests. Special requests requiring a commitment of additional resources shall be approved by DOE prior to fulfilling the request.

Boundaries, Constraints, and Interfaces: None.

C.4.10.8.3 Hanford Radiological Instrumentation Program

The desired outcome of the HRIP is radiological instrumentation and services that provide demonstrated compliance with the radiation monitoring requirements of key customers, and provide technically sound, defensible data for determining adequacy of Site radiological control programs in protecting the health and safety of workers, the public, and the environment.

Key Customers

- DOE
- OHCs

Scope and Requirements

The HRIP shall be designed and implemented based on the expressed types and quantities of portable and semi-portable radiological instrumentation calibration, maintenance, and repair services required by DOE and OHCs, including the capability of performing ~16,000 instrument calibrations each calendar year.

The HRIP shall be managed in a fully integrated manner.

The Contractor shall:

- Perform HRIP services, including the routine pickup and delivery of radiological instrumentation from customers, and the maintenance of software and instrumentation associated with calibration, maintenance, and repair of radiological instrumentation.
- Provide and maintain the capabilities to calibrate, maintain, repair, and perform performance and/or type testing for a broad range of radiological instrumentation designed to detect and/or quantify x-ray, gamma ray, beta particle, alpha particle, and/or neutron radiations across a broad range of energies and intensities. Calibration of radiological instrumentation shall be performed in accordance with appropriate ANSI standards, using calibration sources traceable to the National Institute of Standards and Technology, or equivalent international standards.
- Maintain, manage, procure and modernize the existing Hanford pool of radiological instruments, including developing processes for necessary replacement of instruments.
- Provide a records management system for the capture and retention of records and data associated with calibration, maintenance, and repair of radiological instrumentation, including performance and/or type testing of radiological instrumentation.

- Provide representation to the Hanford Instrument Evaluation Committee and necessary logistical and administrative support for the Committee.
- Provide and maintain technical documentation and specifications of the performance characteristics of radiological instrumentation calibrated and/or maintained. This includes providing technical support to confirm that these performance characteristics continue to meet changing customer monitoring requirements.
- Develop and maintain systems for tracking the status of calibration, maintenance, and repair of radiological instrumentation, and for providing routine, periodic reports on this status to customers.
- Provide prompt notification, to applicable customer point-of-contact, of radiological instrumentation for calibration, maintenance, or repair, if found to be outside customer-required tolerances.
- Provide certification of current activity, emitted dose rate, or surface emission rate for various configurations of field check sources.
- Provide technical and administrative support when, requested by customers, for the purchase of new or replacement radiological instrumentation.
- Interface with customers to determine specific customer radiological instrumentation needs and requirements, to provide requested technical support, and to provide status and results of calibration, maintenance, repair, and/or testing of radiological instrumentation, including out-of-tolerance reports.
- Provide specialized calibrations or modified instrument design or functions (e.g., ruggedized or window designs).
- Maintain software, hardware, and documentation in compliance with requirements of key customers and approved procedures, the approved QA Plan, and appropriate electronic and information management security plans.

Boundaries, Constraints, and Interfaces: None.

C.4.11 Safety and QA

C.4.11.1 Organizational/Safety Culture

Scope and Requirements

The Contractor shall:

- Implement DOE P-450.4, *Integrated Safety Management Policy*, by incorporating DOE's ISM Core Functions and Guiding Principles into management systems/processes.
- Adopt and continuously improve organizational culture (Site core values and behaviors), safety culture, and safety conscious work environment, including implementation and utilization of programs/processes that support employees raising concerns without fear of retaliation. These programs/processes include, but are not limited to: Employee Concerns Program (ECP), the Differing of Professional Opinions Process; Ethics and Compliance Program/Process; and Alternative Dispute Resolution.
- Continuously promote a work environment where employees are encouraged to raise concerns. The Contractor shall define expectations, rigorously reinforce those expectations, and take actions to mitigate the potential for a chilling effect.

- Develop, implement, and maintain a Safety Culture Sustainment Plan (SCSP) within 120 days after transition. The SCSP shall address the safety culture focus areas, such as Leadership, Employee Engagement, and Organizational Learning. Specific deliverables regarding how the SCSP will be evaluated, and how updates will be provided to DOE will be included in the SCSP. The Contractor shall review and update the SCSP at least annually.
- Conduct business in a manner fully transparent to DOE. Activities are demonstrated by open, clear, and well communicated management actions and technical and project documentation. Identified issues and trends are proactively shared with DOE.
- Champion a culture that rewards proactive self-identification and reporting of issues that identifies and takes action on systemic weaknesses leading to sustained continuous self-improvement.

The Contractor may use DOE NTC safety culture training for senior and mid-level managers, front-line supervisors, and employees, if desired.

Boundaries, Constraints, and Interfaces: None.

C.4.11.2 Radiation Protection

The desired outcome is an effective radiation protection program that is protective of the workforce and public through the use of an effective As Low As Reasonably Achievable process.

Scope and Requirements

The Contractor shall:

- Develop and implement a radiological health and safety program that is consistent with DOE STD-1098-2017 guidance for implementing occupational radiological control programs.
- Perform radiological work activities in compliance with a documented Radiological Protection Program (RPP) as approved by DOE. Before the Contractor's radiological work may commence, the Contractor shall adopt and implement another contractor's approved RPP as its own, until receiving DOE approval of the Contractor's final RPP. The RPP shall specify the existing and/or anticipated operational tasks that are intended to be within the scope of the RPP.
- Utilize the Hanford RSS organization for portable radiological instrumentation purchase, repair and calibration, internal dosimetry, external dosimetry, and radiological dosimetry records management.
- Utilize the Hanford Site Radiological Access Control Software for field radiological operations.
- Comply with the Hanford Radiological Health and Safety document, including participation as a voting member in the Hanford Site Radiological Control Forum (HSRCF). The Contractor shall be bound to the decisions of the HSRFC.

Boundaries, Constraints, and Interfaces: None.

C.4.11.3 Worker Safety and Health Management

The desired outcome of the Worker Safety and Health Management function is assurance that the workplace is free of recognized hazards, which may cause or have the potential to cause death or serious physical harm to Hanford Site personnel.

Scope and Requirements

The Contractor shall empower workers through active pursuit of employee involvement in work planning and control (WP&C), and through implementation of the tenets of VPP. The Contractor shall support and facilitate transition and maintenance of this achievement by the workforce until the Contractor can apply for recognition as a new entity.

The Contractor shall provide support to DOE for safety and health activities, as requested.

The Contractor shall develop (or adapt) and submit a Worker Safety and Health Program for DOE review and approval.

As applicable, the Contractor shall submit to DOE a list of closure facility hazards within 90 days after identifying such hazards. DOE will accept either the closure facility hazard controls or direct additional actions to either achieve compliance or provide additional controls to protect the workers.

On behalf of the DOE Federal Employee Occupational Health and Safety Program, the Contractor shall collect upon DOE request IH samples (including evaluation and recommendations) and process them under the Contractor's Record Program (e.g., indoor air quality, evaluations, Be, asbestos, lead).

The Contractor shall provide for a respiratory protection equipment program which includes, but is not limited to, maintenance, testing, repair, cleaning, and servicing.

Boundaries, Constraints, and Interfaces: None.

C.4.11.4 Workplace Substance Abuse Programs

The Workplace Substance Abuse Program (WSAP) activities support DOE contractors, their subcontractors, and other low-tier subcontractors and includes Contractor personnel who are in testing-designated positions. The Contractor is expected to maintain a workplace free from the use of illegal drugs and alcohol through the overall administration of the WSAP, which includes developing procedures, identifying individuals in testing-designated positions, conducting employee and supervisory training, testing programs, management of the WSAP records, and interfaces with OHCs.

Scope and Requirements

The Contractor shall:

- Provide a WSAP Management Plan to DOE for approval within 30 days of NTP, and review and update the plan annually.
- Establish a testing program for employees in testing designated positions. Testing designated positions are identified by the Contractor and apply to employees whose duties involve:
 - Access to or handling of classified information;
 - Access to or handling of SNM;
 - High risk of danger to life, the environment, public health and safety, or national security; or
 - Transportation of hazardous materials to or from a DOE Site.
- Coordinate and track drug/alcohol testing for OHCs, as required by DOT regulations.
- Develop procedures and coordinate records management for the implementation of the WSAP to help maintain a workplace free from the use of illegal drugs. The Contractor procedures shall include

education awareness programs on hazardous substances in the workplace, supervisory training regarding their responsibilities with impaired employees, and employee assistance program services.

- Report occurrence and/or reasonable suspicion testing regarding the WSAP to DOE within four (4) hours from the time the testing is ordered.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: The Occupational Medical Services Provider administers the testing for illegal drugs and alcohol, and provides the pass/fail test results.

Interfaces: Occupational Medical Services Provider.

C.4.11.5 Event Notification, Reporting, and Investigation

The desired outcome for Event Notification, Reporting and Investigation is accurate and timely notifications, reporting, and investigation of environmental, safety, and health events.

Scope and Requirements

Notifications

The Contractor shall:

- Establish and implement practices to ensure appropriate event notification for timely response, addressing the following elements:
 - Procedures for internal, DOE, and external notifications, including events, persons to be notified, persons responsible to make notifications, contact information, and recordkeeping. If an event occurs while the Contractor is working in a facility operated by OHC, the contractor who has primary responsibility for the facility or activity shall make the event notification.
 - Communications equipment for notifications.
- Notify the DOE Facility Representative (FR) for events such that real time notification of DOE line management occurs for personnel injuries, personnel radioactive contamination or internal deposition, chemical exposures, work stoppages, and other situations that might receive public, regulatory, or DOE-HQ attention. In addition, the FR shall be notified on a 24/7 basis of events that reach a threshold to notify the Facility Manager, including non-reportable and adverse conditions. Specific criteria for FR notification shall be, but are not limited to, the following:
 - Employees receive occupational injuries or are exposed to hazards that result in transport to a first aid facility, a hospital, or cause the individual to be entered into a medical monitoring program.
 - Employees are unexpectedly exposed to hazardous substances (e.g., Be, asbestos, mercury, lead) in excess of regulated limits, or unplanned immediately dangerous to life and health conditions.
 - Employees receive skin or personal clothing contamination where decontamination must be performed. Contractors shall distinguish between clothing contamination and skin contamination.
 - Employees have indications of radioactive internal deposition, as verified by positive nasal smears, positive workplace monitoring results requiring follow-up (i.e., whole body count, bioassay), or other measured indications of a potential internal deposition.

- When a stop work is invoked for a safety-related reason, by either workers or Contractor management.
- Whenever a situation is discovered that presents an immediate danger to workers, the environment, or the public, or when it is determined such a condition was known to exist and was not mitigated.
- Whenever the following barriers associated with determining isolation conditions for hazardous energy fail: Tagout Preparation, Technical Review, Installation, Verification, Safe Condition Check, and Safe to Work Check.
- Transportation incident/accident involving radioactive or hazardous materials.
- Whenever an incident occurs that involves the potential loss of control or compromise of classified or nuclear materials.
- Whenever non-compliance with an environmental permit or requirement is identified and self-notification to a regulatory authority is planned.
- Notify the FR prior to conducting event investigations (e.g., critique, fact-finding, post-job). Notification will be made, allowing sufficient time for the FR to attend.

Reporting

The Contractor shall report Occurrences resulting from activities performed by Contractor personnel and subcontractors in support of facility operation and other externally driven events (such as natural phenomena), categorize the occurrences, notify DOE elements as required, and prepare and submit Occurrence Reports. Reporting Programs shall include the following: Event or Condition Identification and Response, Event or Condition Categorization, Prompt Notifications, Occurrence Report Processing, Occurrence Investigation and Analysis, and Identifying Safety Performance Trends and Recurring Occurrences.

Investigation

The Contractor shall:

- Establish and implement operations practices for investigating events to determine their impact and prevent recurrence, addressing the following elements:
 - Specific events requiring investigation and criteria for identifying other events or conditions to be investigated;
 - Designation of investigators and their training and qualification;
 - Investigation processes and techniques;
 - Causal analysis and corrective action determination;
 - Event investigation reporting, training, and trending; and
 - Responses to known or suspected sabotage.
- Support DOE accident investigations for accidents occurring on self-performed and subcontracted work activities, as required in current DOE directives.

Boundaries, Constraints, and Interfaces: None.

C.4.11.6 Activity Level Work Planning and Control Program

The desired outcome for the Activity Level WP&C Program is to:

- Ensure protection of the worker, the public and the environment by scoping, planning, scheduling and preparing in a manner that results in the safe execution of work.
- Eliminate or mitigate the hazards associated with work.
- Identify the impact of work to the facility and work groups and plan, control, and execute the work without incurring unanticipated issues resulting from the work.
- Maximize the efficiency and effectiveness of Site personnel and material resources.
- Maximize the availability and reliability of facility equipment and systems.
- Maximize continual improvement and learning with robust feedback and improvement processes.

Scope and Requirements

The Contractor shall develop and submit for review and approval an Activity-Level WP&C Program that includes processes and procedures that meets the tenets of DOE-HDBK-1211-2014. The tenets of the handbook are required for this Contract and are not limited to nuclear facilities and activities. If deemed by the Contractor to improve safety and/or productivity, the Contractor, along with OHCs, is encouraged to develop a Sitewide consensus WP&C Program and associated implementing software system. Once the program has been approved by DOE, proposed changes, other than minor (e.g., administrative, no change to intent or rigor), require submittal of revisions to DOE for review and approval.

Boundaries, Constraints, and Interfaces: None.

C.4.11.7 Quality Assurance

The desired outcome is a Quality Assurance Plan (QAP) that ensures that products and services provided or performed by the Contractor are of a high quality and meet or exceed stated requirements.

Scope and Requirements

The Contractor shall:

- Submit a QAP that implements DOE O 414.1D and 10 CFR 830 subpart A. Establish, implement, and maintain a Quality Assurance Implementation Plan (QAIP) using a graded approach. The QAIP shall be documented and submitted for DOE approval as a standalone document or combined with the QAP.
- Ensure that programs provide for prevention of suspect/counterfeit items and provide for proper grading of safety software.

C.4.11.7.1 Requirements Management Program

The desired outcome is the implementation of an effective requirements management program that establishes and maintains a complete requirements dataset that provides bidirectional traceability to implementing provisions, and from those documented implementing provisions back to applicable requirement sources. The requirements sources include, but are not limited to, direct contractual provisions; applicable CRDs; applicable DOE directives; applicable federal, state, and local regulatory requirements; permit provisions; applicable DOE Standards; applicable Hanford Site standards; adopted industry standards; adopted guidance; enduring commitments from enforcement actions or corrective

actions; and demonstrating that applicable requirements are adequately implemented within the Contractor's documented programs, plans, procedures, and/or work instructions.

Scope and Requirements

The Contractor shall:

- Establish and facilitate a Hanford Sitewide Requirements Management Forum for benchmarking best practices, consolidating feedback, and maintaining software configuration across the Hanford Site.
- Develop, document, and implement an effective Sitewide requirements management system.
- Implement a Requirements Management System that entails managing legal, regulatory, contractual, and technical requirements, and ensuing commitments of a project to ensure and maintain alignment between those requirements and the project's implementing plans, activities, and work products.
- Maintain the system for Requirements Management for the life of this Contract and shall ensure DOE can utilize the system.
- Procure, incorporate, and utilize a commercial off the shelf requirements management software.
- Perform as the designated Hanford Site Service provider, who administers the software and provides initial and ongoing training on its use, and coordinate the Requirements Management forum.

C.4.11.7.2 Procedure Management

The Procedure Management System provides electronic processing and delivery for the DOE and OHCs procedure documents on the intranet. DOE provides technical procedure content, and the system and associated services is provided by the Contractor.

Scope and Requirements

The Contractor shall:

- Provide, implement, administer, and maintain a Procedure Management system.
- Provide initial and reoccurring training on its use at a frequency necessary to maintain capability and proficiency.
- Develop and maintain a Procedure Management Standard and Procedure Management Procedure for DOE approval; changes to these shall be approved by DOE.
- Coordinate and interface with DOE to maintain the configuration of the process and the Standard and Procedure.
- Monitor program costs and identify cost efficiencies. Costs shall be measured and reported to DOE annually or as requested by DOE.

C.4.11.7.3 Control of Purchased Items and Services

Scope and Requirements

The Contractor shall develop and implement a commercial-grade dedication program that incorporates the guidance of the 2014 Electric Power Research Institute Technical Report *Plant Engineering: Guideline for the Acceptance of Commercial Grade Items in Nuclear Safety-Related Applications*. This program shall be described in detail in the Contractor's QAP and approved by DOE.

Quality Assurance Requirements for Computer Software for Nuclear Facility Applications

The Contractor, in addition to the software requirements contained in the QA programs, shall develop and implement a software program that incorporates the guidance of the Institute of Electrical and Electronic Engineers Software Engineering Standards that are applicable to the Contractor's scope of work. This guidance shall be incorporated into the Contractor's program when addressing software life cycle activities, such as requirements identification, software design, software test planning and testing, and software verification and validation. This program shall be described in detail in the Contractor's QAP and approved by DOE.

Boundaries, Constraints, and Interfaces: None.

C.4.11.8 Conduct of Operations

The desired outcome for Conduct of Operations (CONOPS) is to minimize the likelihood and consequences of human fallibility or technical and organizational system failures; and support safety and mission success.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall:

- Establish a CONOPS Program that includes formal documentation, practices, and actions that implement disciplined and structured operations.
- Develop and implement a CONOPS Program for other than Hazard Category 1, 2, and 3 nuclear facilities, specifically:
 - Water and Sewer Utilities;
 - Electrical Utilities;
 - Through contractor evaluation, other operations that could benefit from the formality of operations; and
 - Provide to DOE for approval, a CONOPS Implementation Matrix consisting of entries for each specific CONOPS requirement and attribute of the program and a citation of the specific documentation that implements the item, or a justification for each item that is not implemented.
- Review, update, and obtain approval of documentation, demonstrating conformance at inception, when changes in conditions require changes in the documentation, and at least every three (3) years or

as directed by DOE (minor administrative changes and corrections or routine updates to cited documents do not require new DOE approval).

Boundaries, Constraints, and Interfaces: None.

C.4.11.9 Beryllium

The desired outcomes are minimized exposures to beryllium workers, reduction of Be contaminated areas, and effective management of workers who are either sensitized or have chronic Be disease.

Key Customers

- DOE
- OHCs

Scope and Requirements

The Contractor shall:

- Assist DOE in the surveillance of OHCs' implementation of the Hanford Site CBDPP. The Contractor shall provide services to DOE to assist federal resources in oversight activities, including the capability to obtain independent Be samples.
- Provide a Be liaison that will interface with the Be Health Advocate regarding implementation of the Hanford Site CBDPP.
- Collect bulk or wipe samples from building/structure surfaces with no visibly accumulated dust, for characterization purposes. The bulk and wipe sample results shall be evaluated against the criteria as described in the Be Sampling Protocol document.
- Investigate building/structure Be survey results that meet or exceed 0.1 $\mu\text{g}/100\text{ cm}^2$ for a wipe sample or 1 ppm for a bulk sample, in accordance with the National Institute for Occupational Safety and Health 7300 series methodology, to identify the extent of potential Be contamination. DOE shall be notified within one (1) working day of results meeting or exceeding these levels. The area where the potential Be contamination was detected shall be re-sampled within three (3) working days, or an alternate time frame. The area may be considered Be free if the geometric mean of the sample results is less than 1 ppm or 0.1 $\mu\text{g}/100\text{ cm}^2$, and no sample results exceed 2 ppm or 0.2 $\mu\text{g}/100\text{ cm}^2$. These criteria do not apply to outdoor waste sites, which shall continue to comply with the current requirements of the Sitewide CBDPP.
- Maintain the centralized database for Be sampling and characterization data collected by OHCs and provide an annual report to DOE summarizing this data.
- Maintain the Beryllium Health Advocate (BHA) program for Be-affected workers on the Hanford Site. This program shall assist Be-affected workers in working with onsite and offsite medical providers and with OHCs.

The BHA shall:

- Attend meetings of the Beryllium Awareness Group (BAG) and the Sitewide CBDPP Committee to support these groups in obtaining documentation, conducting research and addressing issues.

- Provide recommendations to DOE on improvements to the medical restriction/removal process, interfaces with the Hanford Site Workers' Compensation Claims Services contractor, and Be counseling.
- Provide assistance to Be-affected workers (workers who have been diagnosed as Be sensitized, having Chronic Be Disease, or other medical conditions related to Be) in navigating:
 - Workers' compensation claims,
 - EEOICPA claims, and
 - Contractor HR policies and procedures that are applicable to the needs of Be-affected workers, particularly travel policies and procedures for medical-related trips.
- Provide assistance/information to the Hanford workforce about Be-related medical services provided by the Hanford Site Occupational Medical Coordinator and other medical facilities, such as the National Jewish Hospital in Denver, Colorado.
- Assist Be-affected workers in gathering exposure data and other historical/administrative data and provide the data to the affected worker.
- Act as a liaison between contractors, BAG, and the workforce to enhance communications to help resolve issues using existing processes and procedures.
- Identify high interest Be topics and assist in developing communications on those topics.
- Assist OHCs in encouraging workforce participation in Sitewide efforts related to Be (e.g., epidemiology studies, medical surveillance, and historical Be activities onsite).
- Increase worker awareness of the contents of the Hanford Site CBDPP and other sources of Be information.
- Supervisors, planners, and person(s)-in-charge who are involved with work activities involving a Be Work Permit shall complete the existing Be worker training course (complete within 60 days).
- Provide administrative support for the Hanford Site CBDPP, Be webpage, and Site Be training. Provide logistics support to the BAG and CBDPP Implementing Committee.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: Assistance with workers' compensation claims shall be consistent with the Section H clause entitled, *Workers' Compensation*. Assistance provided with EEOICPA claims shall not be inconsistent with Section C.

Interfaces:

- Facilities (including structures, Conex boxes, underground sites) may be transferred by OHCs that may not have previously been identified as Be controlled facilities.
- The Contractor, including the BHA, shall coordinate with the Hanford Site EEOICPA Program Manager when assisting Be-affected workers, with respect to their EEOICPA claims.
- The Hanford Site Occupational Medical Contractor is responsible for implementing portions of 10 CFR 850. Therefore, the Contractor shall coordinate with the Occupational Medical Contractor when implementing the Hanford Site CBDPP.

- The Hanford Site Workers' Compensation Claims Services contractor is responsible for processing workers' compensation claims of specified Hanford Site contractor and subcontractor employees in accordance with Title 51 RCW, *Industrial Insurance*. Therefore, the Contractor and BHA shall coordinate with the Hanford Site Workers' Compensation Claims Services contractor and the DOE Hanford Site Workers' Compensation Program Manager when assisting Be-affected workers with respect to their Hanford Site workers' compensation claims.

C.4.12 General Performance Requirements

The scope of this section includes activities such as Engineering, Business Administration, Program and Project Management, and other general performance requirements. With the exception of Section C entitled, *Interface Management*, these are internal services that support other functional areas within the Contract; therefore, key customers are not listed.

C.4.12.1 Engineering

The desired outcome is an Engineering service that provides engineering leadership and resources to accomplish the work scope.

Scope and Requirements

The Contractor shall:

- Perform engineering, design, 30/60/90 design reviews, design verification and validation, and construction management as needed for its activities within this scope of work and for other activities as directed by the CO.
- Provide interface and coordination and ensure integration between the project technical staff and management, IH, construction, startup, and technology development in order to ensure a consistent approach and common strategy to solving technical challenges.

Implement a centralized engineering organization, separate from project management. Engineering staff may be assigned directly to projects/facilities, or to the centralized engineering organization, or a combination of both, at the Contractor's discretion in order to optimize performance and best support the mission. The Central Engineering Organization shall:

- Include and be led by a position titled Chief Engineer. The Contractor Chief Engineer shall act as the DA (i.e., owner), as it applies to national codes and standards.
- Provide copies of key DA decisions, such as AHJ rulings, to national codes and standards and proposed Interpretations/Clarification requests to DOE 30 days prior to implementation.
- Be staffed by engineering SMEs that are discipline specific leads. The disciplines leads and the Chief Engineer shall be licensed Professional Engineers (PE).
- Engineers who stamp documentation for use on the Hanford Site shall have a current Washington State PE license, when such material is required to be stamped by the State of Washington.
- Be responsible for the development of engineering policies and procedures. Describe in detail and include at a minimum the process for developing functions and requirements, engineering qualifications, design, design reviews, design documents, design reports, drawing format, CM, critical infrastructure management, systems and equipment testing, system health reports (SHR), commercial grade dedication, environmental qualification, calculations, design verification, and project turnover.

- Provide independent discipline-specific design reviews, such as structural reviews, and shall provide the state-mandated level of involvement, oversight and supervision required to stamp designs requiring a PE stamp.
- Maintain the Code of Record for each project. The Code of Records shall be provided to DOE for review and approval prior to issuance.
- Develop and provide oversight and management of the DA program.
- Provide Engineering and Project Design functions. Engineering services shall include the engineering necessary to support systems and facilities relative to planning, operations, maintenance, upgrades, renovations, and replacement for the Contractor scope of work.
- Maintain consistent and high standards for maintaining critical infrastructure. The Central Engineering Organization shall periodically conduct assessments to demonstrate project compliance to the program/procedures. Quarterly SHRs shall be developed to status and trend the operability, reliability and material condition of the critical infrastructure. SHRs shall not only examine the elements in CRD O 420.1C, Chapter V, section 3.c.3, but also examine the key elements of CRD O 420.1C Chapter V, section 3.d, and assess system operability and reliability performance including the following elements:
 - A system scorecard or health score;
 - System operational status including key equipment availability;
 - Maintenance backlog;
 - Closed and outstanding corrective actions;
 - Closed and outstanding problem or adverse condition reports;
 - System deficiencies;
 - System performance trending;
 - Material condition assessment including any walkthrough results; and
 - Other significant events and issues.

Boundaries, Constraints, and Interfaces: None.

C.4.12.2 Business Administration

The desired outcome is cost-effective internal business administration that enables good business decisions, sufficient resources to manage the Contract activities, and a cooperative and (as appropriate) collaborative working relationship with OHCs, stakeholders, and DOE.

Scope and Requirements

The Contractor shall:

- Provide the management expertise, leadership, and business administration processes and systems to perform Contract Section C requirements safely, securely, efficiently, and in a cost-effective manner.
- Provide required business administration activities, including internal management, contract administration, and financial controls.

- Implement necessary business management and risk mitigation processes based on national standards, certified systems, and best business practices.
- Determine the specific methods for accomplishing the business administration activities and be accountable for results and outcomes.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: None.

Interfaces: DOE, Regulators and stakeholders.

C.4.12.3 Internal Audit

The desired outcome is an internal audit function that is fully compliant with applicable requirements.

Scope and Requirements

The Contractor shall conduct internal audits and examination of the records, operations, expenses, subcontractor costs, and the transactions with respect to costs claimed to be allowable under this Contract, at least annually. Up to eight (8) additional audits shall be conducted based on risk analysis, including input from DOE. The results of such audits, including the working papers, shall be submitted or made available to the CO or a Contracting Officer Representative (COR). The Contractor shall include this requirement in cost-reimbursement subcontracts (time and materials, labor hour, cost plus for non-fixed price contracts) with an estimated cost exceeding five (5) million dollars and expected to run for more than two (2) years, and other cost-reimbursement subcontracts as determined by DOE.

The Contractor shall provide routine reports as required by DOE, such as:

- Annual Audit Activities Report,
- Internal Audit Annual Plan,
- Internal Audit Reports, and
- Quarterly Internal Audit Status Report.

Boundaries, Constraints, and Interfaces: None.

C.4.12.4 Employee Concerns Program

The desired outcome is an ECP that effectively addresses, resolves, and prevents recurrence of employees' concerns.

Scope and Requirements

The Contractor shall:

- Accept, for resolution, existing employee concerns unresolved at the close of the initial Contract transition period.
- Establish and maintain an effective and efficient ECP, in accordance with DOE directives.
- Participate in the chartered Hanford Sitewide ECP committee.
- Assist DOE in the resolution of employee concerns in a manner that protects the health and safety of both employees and the public and ensures effective operation of DOE-related activities.

- Ensure employees and subcontractor employees, at time of hire and at least annually thereafter, are advised of their rights and responsibilities to report concerns relating to environment, safety, health, or management of DOE-related activities and to do so without fear of harassment or reprisal.
- Cooperate with DOE assessments used to verify they have acted to minimize, correct or prevent recurrence of situations that precipitated a valid concern.
- Evaluate and attempt to resolve employee concerns in a manner that is protective of the health and safety of employees and the public.
- Use alternate dispute resolution techniques whenever appropriate.
- Conduct an annual self-assessment to measure the effectiveness of the ECP and implement corrective actions, as necessary. Provide to DOE the following to demonstrate measures of effectiveness:
 - Quarterly and annual reports on the number of concerns received, concerns closed, and concerns remaining unresolved at the end of each reporting period (quarterly and annually); and
 - Proof that initial ECP orientation to new employees and managers was conducted as well as annual reminders (such as all employee announcements), as evidenced by quarterly and annual reports.
- Upon receipt, but no later than seven (7) working days after receipt, provide notification to DOE ECP of significant or sensitive staff concerns and allegations of harassment, intimidation, retaliation, or discrimination. Notify the DOE CO within seven (7) working days of receipt of when a Contractor employee has filed a formal complaint of retaliation, reprisal with the U.S. Department of Labor, a state agency, or other non-DOE entity.
- Cooperate with DOE regarding requests for documentation or information involving employee concerns. Maintain configuration control of DOE-0400, *Hanford Site-Wide Employee Concerns Program Procedure*.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: None.

Interfaces: Subcontractors, and/or other federal agencies.

C.4.12.5 Strategic Partnership Projects

The desired outcome is to have an SPP Program that leverages the resources and capabilities of the Contractor to the benefit of the Government.

Scope and Requirements

The Contractor may perform work for non-DOE entities, including other U.S. Government agencies on a fully reimbursable basis.

The Contractor shall:

- Develop and submit to DOE for approval, SPP Program prior to performance of SPP activities.
- Submit SPP proposals for DOE approval prior to making commitments.
- Manage and execute the SPP Program on a non-interference basis with DOE work.

Boundaries, Constraints, and Interfaces: None.

C.4.12.6 Program and Project Performance Management

The desired outcome is predictable and consistent contractor performance aligned to customer needs conducted within annual and multi-year baselines. Successful execution of the program and project performance management work scope will ensure cost and schedule efficiency while minimizing programmatic risks. Performance management practices are used in the performance of work including development of management plans, planning data, disciplined change control processes, service level agreements, and performance measures.

Scope and Requirements

The Contractor shall:

- Ensure that performance management practices are used in the performance of work, including development of management plans, planning data, disciplined change control processes, service level agreements, and performance measures.
- Utilize a graded approach as described in the Contractor's Program Management Plan, Performance Management System Description (PMSD), and other management system documentation.
- Provide the management and technical information and support;
- Enable DOE to meet the data requirements of the DOE Integrated Planning, Accountability and Budgeting System;
- Ensure transparency in program and project performance and efficiency in program and project execution;
- Support audits and evaluations; and
- Support other DOE performance assessment and information needs.

Management and technical information developed under this Contract shall be accessible electronically by the Government.

C.4.12.6.1 Program Management and Integration

Program Management consists of strategic and tactical planning, performance management, CPB management, performance measurement baseline management, risk management, interface management, program/project integration, and the contractor assurance system (CAS). These are functional program management elements that support the Contractor's performance of the other contract functional areas; therefore, key customers are not listed.

The Contractor shall execute the program management work scope to ensure cost and schedule efficiency, while managing programmatic risks. The Contractor shall ensure that performance management practices are used in the performance of work, including development of management, program, and project plans, planning data, disciplined change control processes, service level agreements, and performance measures. Master Plans are specified in some functional areas but shall not preclude the development and completion of master plans for other functional areas. The Contractor shall use master and program plans to ensure the success of the functional areas within the Contract.

This Contract is not a traditional project, but many program and project performance management practices and principles are applicable to ensure effective and efficient delivery of products and services

under this Contract. The application of program and project performance management principles shall be applied using a graded approach. Program/Project Management Principles include:

- Line management accountability;
- Sound, disciplined, and up-front project planning;
- Well-defined and documented project requirements;
- Development and implementation of sound acquisition strategies that incorporate effective risk handling mechanisms;
- Well-defined and managed project scope and risk-based Performance Baselines and stable funding profiles that support original cost baseline execution;
- Development of reliable and accurate cost estimates using appropriate cost methodologies;
- Properly resourced and appropriately skilled project staffs;
- Effective implementation of management systems supporting the project (e.g., QA, risk management, change control, performance management and contract management);
- Early integration of safety into the design process;
- Effective communication among project stakeholders;
- Utilization of peer reviews throughout the life of a project to appropriately assess and make course corrections; and
- Process to achieve operational readiness is defined early in the project for Hazard Category 1, 2, and 3 nuclear facilities.

Some activities, ranging from small infrastructure reliability projects to larger capital asset projects (CAP), require the implementation of increasingly rigorous project management techniques.

DOE will continuously seek to improve performance under this Contract, and will seek effective Contractor program and project performance management and execution.

C.4.12.6.1.1 Program/Contractor Integrated Master Schedule

The desired outcome is an integrated schedule built from individual contractor baselines that provides DOE with an evaluation of Sitewide progress and performance against cleanup program objectives.

Scope and Requirements

The Contractor shall:

- Work collaboratively with OHCs and the Portfolio Analysis function to integrate the HMESC Contractor Integrated Master Schedules (CIMS) into the Hanford Program Integrated Master Schedule (PIMS).
- Develop and maintain the PIMS individual CIMS in accordance with the National Defense Industrial Association (NDIA) Planning and Scheduling Excellence Guide (PASEG).
- Develop and maintain a PIMS/CIMS Supplemental Guidance document that clarifies and specifies the uniqueness of the program approach at Hanford.

- Provide budget baselines to support the budget formulation process and environmental liability audit.

C.4.12.6.1.2 Long Range Planning and Optimization

The Contractor shall align with the Hanford cleanup mission and shall:

- Ensure a life cycle program framework for successful management, operations, technical capability, reliability, quality, and safety.
- Implement a risk-based model and master planning that are integrated with budget estimates and aligned with service level agreements, performance metrics, ISAP, Master Plans, program plans, FIMS, Annual Forecast of Services and Infrastructure, Maintenance Plans, NEPA and other related environmental requirements, NHPA, studies/business case analyses, Project Plans, and mission need documents.
- Implement a programmatic model that creates a scalable approach to operate, optimize, and modernize infrastructure and service delivery, including continual realignment to the DOE cleanup mission and vision.
- Document progress to end states in planning documents, such as ISAP and master plans, and refine end states as services, information, and functions are more fully analyzed and understood.
- Incorporate and integrate requirements of Section C entitled, *Real Property Asset Management*, in the strategic and budget planning.
- Close infrastructure, functional, and service gaps and identify future infrastructure and service needs and develop solutions to close these gaps with IPs, including needs outside this Contract term.
- Plan work through the life cycle.
- Implement a forward thinking program for operating, maintaining, and investing that meets Contract requirements and enables life cycle cost reductions.
- Develop performance metrics for the functional areas that will be used to evaluate performance of functions delivered under this Contract and the physical condition of infrastructure and utilities, including systems and equipment necessary for the life cycle of Hanford cleanup for DOE approval.

C.4.12.6.1.3 Interface Management

The desired outcome is to provide effective and efficient delivery of Contract services to OHC and establish high-level policy between senior contractor management to maximize worker productivity.

Key Customers

- DOE
- OHCs

Scope and Requirements

Interface Management is a key Site function for the effective and efficient delivery of Contract services to OHCs and an integral part of resolving issues from detailed field operations to establishing high-level policy between senior contractor management. Interface Management success is defined by the results that stem from two or more organizations working together to develop solutions within the parameters of their contracts. The objective of Interface Management is to solve issues at the lowest level possible in the respective organizations, to maximize project efficiency and worker productivity. The Contractor and

OHCs shall make every effort to improve mutual understanding and cooperation and to seek resolutions in the best interest of the Government, as opposed to an individual contractor's best interest.

The Contractor shall:

- Develop a Hanford Site interface governance process that outlines the inter-relationships of interface management documents that help define the business structure whereby hundreds of work transactions take place daily between the various Hanford Site prime contractors. The Hanford Site interface governance policy also helps to illustrate the different interface types and processes for managing these inter-contractor transactions, including Service Delivery Documents, MOAs between individual companies, and current Administrative Interface Agreements (AIA), ICDs, and WTP-ICDs. The Site Governance Values, Objectives, and Expectations include, but are not limited to:
 - Making decisions that are in the best interest of the Government, without regard to individual contractor operating interests.
 - Forecasting, adapting, and re-aligning to meet the changing business environment and DOE decisions.
 - Seeking and adapting best industry practices for corporate governance.
 - Being flexible and facilitating change for DOE.
 - Being trustworthy and transparent with customers.
- Maintain a repository for interface agreements.
- Establish a Contractor Interface Board (CIB) to resolve interface issues. The Contractor shall attempt to resolve interface issues through the CIB prior to escalating an issue to DOE.
- Within six (6) months of completion of transition of the last contractor identified in the Section J Attachment entitled, *Hanford Site Services and Interface Requirements Matrix*, the contractor shall lead a review of the Hanford Site Services and Interface Requirements Matrix, with OHCs, and submit to DOE proposed, agreed upon changes to the Hanford Site Services and Interface Requirements Matrix for incorporation into Hanford Site contracts.
- Be consistent with the Section H clause entitled, *Hanford Site Services and Interface Requirements Matrix*, the Contractor shall establish, appropriately document, and manage interfaces in accordance with the Section J Attachment entitled, *Hanford Site Services and Interface Requirements Matrix*, and agreements made with OHCs, DOE, and other Site users. Interface agreements shall detail the aspects of the interface including standard and special service circumstances.
- Conduct periodic updates to the Hanford Site Services and Interface Requirements Matrix.
- Submit the Hanford Site Services and Interface Requirements Matrix to DOE.
- Utilize available management tools and best industry practices to execute an effective Interface Management function. The requirement for this scope of work is an effective Interface Management function that establishes, documents, and communicates interface activities within the boundaries of this Contract and particularly the Section J Attachment entitled, *Hanford Site Services and Interface Requirements Matrix*.

C.4.12.6.1.4 Graded Approach

The desired outcome is predictable and consistent Contractor performance, aligned to mission needs and conducted within annual and multi-year baselines.

Scope and Requirements

The Contractor shall implement program and project performance management practices and principles to ensure effective and efficient delivery of products and services under this Contract. Program formulation activities, such as studies to recommend system changes and project formulation (justification of project need) based on customer forecasts, maintenance trends, condition assessments, risk mitigation and system design life, are required along with periodic studies designed to confirm opportunities to improve life cycle cost/risk/benefits through new methods or new technologies. The Contractor shall apply the definitions below in determining the graded approach:

- Operations activities (i.e., electrical utilities operations, such as switching) are level of effort activities – Effort that is not discretely measurable or for which measurement is impracticable may be classified as level of effort. Apply alternative performance measurement approaches (such as metrics).
- Maintenance, repairs, and betterments to real property or installation of new real property asset less than \$150,000 (i.e., water maintenance, IT maintenance). Apply alternative performance measurement approaches (such as metrics). Apply project management principles using a graded approach with minimal use of Earned Value Management System (EVMS) metrics.
- Maintenance, repairs, and betterments to real property or installation of new real property asset between \$150,000 and \$499,999 (i.e., fixing a pump system, meteorological tower). Apply alternative performance measurement approaches (such as metrics). Apply project management principles using a graded approach with moderate use of EVMS metrics.
- Maintenance, repairs, and betterments to real property or installation of new real property asset between \$500,000 and \$9,999,999. Apply alternative performance measurement approaches (such as metrics). Apply project management principles using a graded approach with significant use of EVMS metrics.
- Maintenance, repairs, and betterments to real property asset or installation of new real property asset \$10 million and greater. Apply alternative performance measurement approaches (such as metrics). Apply project management principles using a graded approach with full use of EVMS metrics.

Management and technical information developed under this Contract shall be accessible electronically by the Government.

C.4.12.6.2 Performance Management

Standard earned value measurement, traditionally used to measure performance of CAPs, is neither sufficient to measure the progress of the programmatic activities in the PWS, nor is it appropriate. Therefore, additional performance metrics and milestones are used to define the progress of programmatic activity and, at some level, shall be linked to the Hanford Site mission.

Scope and Requirements

The Contractor shall:

- Plan work, including work beyond this Contract performance period to layout the life cycle of the activity.
- Break down scope into manageable pieces that can be assigned to responsible organizations for control of scope, schedule, and cost objectives.
- Integrate scope, schedule, and cost objectives into a plan by which accomplishments may be measured.
- Analyze significant variances and implement management actions to mitigate risks and manage cost and schedule performance.
- Create performance metrics that measure the progress of an activity toward completing scope of the PWS and through the life cycle of the activity.
- Assess cost performance by utilizing red/yellow/green indicators assigned in terms of the variance determined between the dollars planned to be spent for the month against the actual dollars spent in the month. Cost performance for Reliability Project Investment Portfolio (RPIP) projects is also assessed to capture project performance to date, through the life cycle of the component work scope.
- Measure schedule progress by comparing the planned amount for each metric by month and completion of milestones. Schedule performance for the RPIP and its components shall be captured for the life cycle of the work scope components.

C.4.12.6.2.1 Program Management System

The Contractor shall prepare and submit, for DOE approval, a Program Management Plan consistent with a graded application. The Program Management Plan shall describe the approach for managing and controlling the activities necessary to execute this Contract and shall focus on Contractor policies, methods, and approach to tailoring requirements to achieve integration of scope, schedule, cost, risk and funding information, inclusive of performance metrics, service level agreements, and service/maintenance work control.

C.4.12.6.2.2 Performance Management System

The Contractor shall provide, as an attachment to the Program Management Plan, a PMSD for DOE approval that is consistent with the graded application of the requirements. The PMSD implements the requirements for an Integrated Work Control System using a graded approach, and describes, in detail, the Performance Management System as described in the Program Management Plan.

The PMSD shall describe the management processes and controls that will be utilized to manage and control work, and complete Contract requirements. The PMSD shall include:

- The processes and the hierarchy of documents that will be used to describe and maintain the performance management system.
- The processes the Contractor intends to use for change control, work control, configuration control, interface control, system effectiveness assessment, and document control.
- The organizational breakdown structure, including roles and responsibilities of each major organization and identification of key management positions; and
- A list of software and an interface diagram of the systems that the Contractor proposes to use for performance management and control.

The Contractor shall:

- Provide necessary support to conduct the initial and subsequent evaluations and closure of corrective actions. Upon approval of the Program Management Plan by DOE.
- Fully implement the PMSD.
- Obtain CO approval prior to implementing changes to the Program Management Plan that would reduce the rigor, discipline, or effectiveness of the Performance Management System.
- At least annually, perform an assessment of the effectiveness of the Performance Management System; DOE shall be invited to participate in self-assessments.
- Provide DOE with access to records, data, and plans for purposes of initial approval, approval of proposed changes, and the ongoing operation of the performance management system.

C.4.12.6.2.3 Scope Management System

Scope management is an ongoing function that defines the scope and maintains this Contract Work Breakdown Structure (CWBS). The desired outcome is a defined scope baseline managed under change control.

The Contractor shall develop, as part of the PMSD, a Scope Management System description that describes the process of implementing and controlling of this Contract scope of work in the CPB. The document shall include the CWBS, CWBS scope statements, and deliverables.

C.4.12.6.2.4 Estimate Management System

Contractor developed cost estimates form the basis of the cost baseline of the CPB and are important when evaluating proposed contract changes. DOE uses these cost estimates for budget formulation, contract change management, cleanup program planning, establishing a database of estimated and actual costs, and performance measurement. The desired outcome is a credible, well-documented, accurate, and comprehensive estimate that is to the maximum extent practical, activity-based.

The Contractor shall develop, as part of the PMSD, an Estimating System Description that describes the process of initiating, preparing and controlling estimates.

The estimating system shall define and differentiate between Total Project Cost (TPC), Total Estimated Cost, Other Project Costs, and Capital Equipment Not Related to Construction for the purposes of determining the nature of the work. The estimating system shall accommodate multiple estimating methods and ranges of detail from activity and resource-based estimates for execution planning as well as parametric and other cost modeling techniques to support life cycle planning.

C.4.12.6.2.5 Schedule Management System

Scheduling is an ongoing function that creates and updates the Life Cycle Program Baseline schedule. The CIMS integrates the operations activities, CAPs and other activities managed by the contractor into one schedule. DOE will use the individual CIMS from the Contractor and OHCs to construct the PIMS. The desired outcome is a CIMS that uses a standardized coding structure to integrate the operations activities and CAPs in the contract, and integrate into the PIMS.

The Contractor shall:

- Develop and maintain, as part of the PMSD, a schedule management system in accordance with the Generally Accepted Scheduling Principles set forth in the NDIA PASEG and best practices in the GAO Schedule Assessment Guide: Best Practices for Project Schedules.
- The system shall be capable of delivering the PIMS, CIMS, and multi-level schedules that support operations and project activities and are network logic driven and resource loaded.
- Maintain the Primavera Scheduling Software (P6) tool.

C.4.12.6.2.6 Earned Value Management System

Following the award of a CAP that meets the threshold for full mandatory application of EVMS, the Contractor shall develop and submit for DOE approval an EVMS system description and separately identify this project in monthly reports. The Contractor shall self-certify the EVMS for this CAP. This self-certification on the CAP should utilize a streamlined certification process.

For routine use of EVMS-like measures within context of the graded approach describe, as part of the PMSD, the specific EVMS guidelines and methods associated with each of the graded application levels of minimal, moderate, significant, and full. No separate certification will be required for graded application of EVMS.

C.4.12.6.2.7 Change Control System

The Contractor shall develop, as part of the PMSD, a Change Control Process description, with defined change authorities consistent with the approved Program Management Plan. The Contractor shall implement the Contractor Change Control Process with the CPB used as the reference for changes. The CPB may be changed only through the Contract Modification Process. The Contractor Change Control Process shall ensure that definitized contract modifications and other changes within the contractors control are maintained under CM and implemented in a timely manner into the contractor's management systems.

The baseline change process shall be sufficiently rigorous and disciplined to ensure that the Performance Measurement Baseline is accurate, aligned with the CPB, up to date and capable of providing meaningful data and information.

Baseline change information; including contract modifications, Change Request, change log, and management reserve (MR) log shall be kept current and made accessible to DOE through the Hanford Data Integrator or its online equivalent.

C.4.12.6.2.8 Contractor Assurance System

The desired outcome is a comprehensive, robust system of integrated management processes that inform management decision making and enable the Contractor's accomplishment of the mission in an effective, efficient, safe, and secure manner. The transparency of these systems to federal oversight enables DOE's oversight to be accomplished efficiently and effectively, by utilizing and leveraging the outcomes and information from effective CAS implementation. DOE's desired outcome includes implementation and administration of an effective, integrated Sitewide CAS.

Scope and Requirements

The CAS shall cover the full scope of Contractor operations and be applied to operating and business functions, including systems for the protection of the worker, public, environment, property, business, and financial matters.

The Contractor shall:

- Administer and maintain the Sitewide CAS software business enterprise suite, the *Hanford Sitewide Business Standard for Contractor Assurance Systems*, and the CAS Forum.
- Implement the Hanford Sitewide Business Standard for CAS.
- Incorporate and utilize the CAS software business enterprise suite.
- Participate in the CAS Forum.

Boundaries, Constraints, and Interfaces: None.

C.4.12.6.3 Scope, Schedule, and Cost Baseline

C.4.12.6.3.1 Life-Cycle Program Baseline

The Contractor shall develop and maintain a program life cycle integrated and traceable technical scope, schedule and cost planning data utilizing a "rolling wave⁵" concept in which the upcoming fiscal year is addressed in detail and the following years in decreasing levels of detail. Life cycle planning information beyond the upcoming fiscal year and the succeeding years may be provided at a summary level of detail.

C.4.12.6.3.2 Contract Performance Baseline

The CPB is the Contract life cycle integrated and traceable technical scope, schedule, and cost data that encompasses the activities to execute the requirements of this Contract. The CPB represents the overall HMEESC Estimated Contract Cost. The CPB shall include the following:

- The following documents shall be viewed collectively as the technical basis for the CPB:
 - The Contract PWS;
 - Approved ICDs;
 - WBS dictionary sheets, with DOE approval, required at the Contractor Control level 3;
 - Schedule at WBS level 4; and
 - Time phased resource-loaded contract life cycle cost estimate of the negotiated contract (Estimated Contract Cost).

The CPB shall comply with the following requirements:

- The CPB scope, cost and schedule shall be linked through utilization of the WBS provided by DOE or as otherwise approved by DOE. The WBS shall encompass the activities required by this Contract and provide the basis for program/project control system components, including estimating, scheduling, budgeting, and program/project performance reporting. Control accounts within the WBS shall be identified.
- The CPB Infrastructure Reliability Project schedule shall:
 - Include applicable external interfaces, the Contractor's TPA milestones and other regulatory and DNFSB commitments, and GFE or information dependencies.
 - Be an integrated, logical network-based, resource-loaded plan that correlates to the WBS, is vertically traceable to the control accounts, and successfully aligns the Contractor's schedule.

⁵ A three (3) year rolling wave concept includes the current budget execution year, plus the two (2) years following.

The schedule shall be capable of summarizing from control accounts to higher WBS levels, and may also contain other discrete activities agreed to by DOE and the Contractor.

- Include activities of a general or supportive nature associated with Infrastructure Reliability Projects that shall be logic linked in the schedules for those projects. Other activities of a general or supportive nature will be included in the Cost Baseline, but will be excluded from the schedule.
- Additional working level schedules deemed necessary by the Contractor shall be integrated with the CPB and able to provide the graded reporting approach.
- CPB cost estimate shall include project resource plans, detailed resource estimates, basis of estimates (BOE), budgetary requirements, and identification of direct costs, indirect costs, and MR.
- The method used to measure performance shall be identified for each Work Package utilizing the “rolling wave” concept.
- The CPB shall be kept current and made accessible by DOE through online access to electronic files.

The Contractor shall develop and submit an initial CPB for DOE approval. The baseline submittal shall include:

- WBS and WBS dictionary sheets at the WBS level 3;
- Basis of estimate for each WBS element at the control account level 4; and
- Time-phased cost estimates and resource-loaded schedule at WBS level 4.

The WBS, WBS dictionary data, and the Basis of Estimate data shall be provided in either Microsoft Word® or Microsoft Access® format. Cost data shall be provided in Microsoft Access® or Microsoft Excel® format and the schedule shall be provided utilizing the current version of P6 software unless agreed to otherwise by DOE.

Following initial submission, baseline information shall be kept current and made accessible to DOE through online access to electronic files.

C.4.12.6.3.3 Performance Measurement Baseline

The Performance Measurement Baseline (PMB) is a contract life cycle integrated and traceable technical scope, schedule, and cost baseline that encompasses only the activities to execute the work scope requirements that are directly funded from DOE to the Contractor, and being performed under this Contract. If the Contractor is separately authorized any CAP over \$50 million in value, these CAPs shall be separately identified in monthly contract performance reports. The PMB is a subset of the CPB that excludes MR, Request for Services (RFS), and UBS.

The PMB shall comply with the Contractor’s performance management system.

C.4.12.6.3.4 Integrated Investment Portfolio

A balanced portfolio of activity investments must be maintained for the outcomes defined in the Performance Evaluation Management Plan to be realized. Functionally, the Integrated Investment Portfolio (IIP) is derived from the PMB and establishes the annual agreement between DOE and the

Contractor as to service levels and planned activities achievable within the expected funding for the planning period.

Based on the annual DOE scope direction, develop an execution year IIP, conforming to execution year funding levels against which future adjustments in scope or funding may be evaluated for impacts and creating a basis for documenting elements of contract scope that have been differently time-phased or eliminated or otherwise adjusted as a result of these impacts. These adjustments shall be incorporated into the IIP, both execution year and out-years, in accordance with the approved Change Control Process. The out-year adjusted IIP data shall form the basis for DOE budget formulation and the Contractor infrastructure and services alignment planning. IIP information shall be kept current and made accessible to DOE through the Hanford Data Integrator or its online equivalent.

For instances where the IIP identifies elements of Contract scope that have been differently time-phased, eliminated, adjusted, or otherwise differ from the CPB, the IIP will form the basis for subsequent Contract direction to ensure continued alignment of the CPB, including the preparation of contract change proposals.

C.4.12.6.3.5 Reliability Project Investment Portfolio

The RPIP comprises of the work scope related to updating, upgrading or replacing elements of the fixed infrastructure. These investments may be capital asset improvement projects, either line item or general plant projects, or they may be maintenance activities. They may be designed and implemented by either the Contractor staff or by its subcontractors. The RPIP is a subset of the IIP and its configuration shall be maintained in accordance with the approved Change Control Process.

Reliability Project investments shall be selected through a process that involves project stakeholders, including DOE sponsors. The Contractor shall develop and submit the Reliability Project Investment Selection Process for DOE approval. The process shall include selection criteria as well as go/no-go decision criteria for various project phases. This process may be incorporated into the Contractor Change Control Process or maintained as a separate process document.

RPIP information, like that of the IIP, shall be maintained current and made available to DOE through the Hanford Data Integrator or its online equivalent. Information maintained for the RPIP shall include the overall RPIP listing showing the time-phased investments as well as individual investment basis documentation.

Individual RPIP information available to DOE comprises the project documentation from inception through closeout including, but not limited to, the following, consistent with the value, risk and complexity of the work scope:

- Functional criteria;
- Capital asset determinations;
- Plant forces work reviews;
- Project Execution Plans; including roles, responsibilities, accountabilities and authorities, key milestones and metrics;
- Risk Management Plans and Risk Registers;
- Detailed scoping statements;
- Design media;

- Cost estimates, both point and range commensurate with the maturity of the project;
- Schedule estimates, both point and range commensurate with the maturity of the project, including go/no-go decision milestones for various phases of the work;
- Baseline Change Requests (BCR), Transaction Records, and their logs;
- MR and MR log;
- Progress and performance reviews/reports;
- Inspection plans and reports; and
- Acceptance plans and reports.

C.4.12.6.4 Support for Alternatives Analysis

DOE is required to conduct an independent alternatives analysis for CAPs to ensure that viable options are thoroughly considered and the best alternative is recommended. The desired outcome is a capability to conduct alternatives analysis, on an as needed basis, in accordance with the best practices in GAO-15-37.

The Contractor shall conduct alternatives analysis for CAPs on an as needed basis.

C.4.12.6.5 Performance Reporting

C.4.12.6.5.1 Monthly Contract Status Reporting

The Contractor shall submit a Monthly Contract Performance Report representing the prior month's performance, transmit it to DOE by the last Tuesday of each month, and electronically update the Mission Essential Services node of the DOE Primavera schedule database with the Primavera "XER" files for the baseline and current working schedule. The Monthly Contract Performance Report shall be a written report that includes, but is not limited to, the following:

- Project manager narrative assessment;
- Significant accomplishments and progress towards completion of the Contractor goals and objectives;
- Major issues, including actions required by the Contractor and DOE;
- Analysis of funds expenditure with fiscal year spend forecast projections;
- Evaluation of safety performance (including metrics and recordable injuries, lost-time injuries, and near-misses);
- Evaluation of performance metrics for key services provided under this Contract;
- Evaluation of the condition of infrastructure and utilities, including facilities, equipment, and systems;
- Performance information using the following OMB Contract Performance Report formats (DID-MGMT-81466):
 - Format 1, DD Form 2734/1, Work Breakdown Structure; data reported at WBS level 3;
 - Format 3, DD Form 2734/3, Baseline; and
 - Format 5, DD Form 2734/5, Mar 05, Explanations and Problem Analysis.
- Stated baseline schedule, which reflects progress against the baseline;

- Variance discussion(s), and potential issues related to significant milestones;
- Contract reconciliation and estimates-to-complete;
- Change control section that summarizes the scope, technical, cost, and/or schedule impacts resulting from any implemented actions; and that discusses any known or pending baseline changes and utilization of MR;
- Risk assessment including identification of critical risks, actions planned, and actions taken to address those risks, potential problems, impacts, and alternative courses of action, including quality issues, staffing issues, assessment of the effectiveness of actions taken previously for significant issues, or the monitoring results of recovery plan implementation;
- Actions required by DOE including GFS/I and DOE decisions; and
- Pertinent business structure information.

Monthly, or as otherwise agreed to by DOE, the Contractor shall conduct a Contract/project reviews with DOE and be prepared to address any of the information in the monthly report, as well as other information requested by DOE.

Required performance reporting information shall be accessible to DOE through the Hanford Data Integrator or its online equivalent. In addition, transmit an electronic copy of the Monthly Performance Report to the EM Office of Project Assessment at contractorsMPR@hq.doe.gov.

C.4.12.6.5.2 Monthly Project Status Reporting

The Contractor shall submit a Monthly Project Performance Report representing the prior month's performance and transmit it to DOE by the last Tuesday of each month. The Monthly Project Performance Report shall be a written report that includes, but is not limited to, the following:

- Project manager narrative assessment.
- Significant accomplishments and progress towards completion of the Contractor's goals and objectives.
- Major issues, including actions required by the Contractor and DOE.
- Analysis of funds expenditure with fiscal year spend forecast projections.
- Evaluation of safety performance (including metrics and recordable injuries, lost time injuries, and near-misses).
- Evaluation of timely and efficient delivery of projects provided under this Contract. Metrics for projects include quality, reliability, cost, schedule, and risk management through the stages of project maturity.
- EVMS information using the following OMB Contract Performance Report formats (DID-MGMT-81466):
 - Format 1, DD Form 2734/1, Mar 05, Work Breakdown Structure,
 - Format 1 data reported at WBS level 3,
 - Format 3, DD Form 2734/3, Mar 05, Baseline, and

- Format 5, DD Form 2734/5, Mar 05, Explanations and Problem Analysis.
- Stated baseline schedule, which reflects progress against the baseline.
- Variance discussion(s) and potential issues related to significant milestones.
- Contract reconciliation and estimates-to-completion.
- Change control section that summarizes the scope, technical, cost, and/or schedule impacts resulting from implemented actions; and that discusses known or pending baseline changes and utilization of MR.
- Risk Assessment, including identification of critical risks, actions planned, and actions taken to address those risks, potential problems, impacts, and alternative courses of action, including quality issues, staffing issues, assessment of the effectiveness of actions taken previously for significant issues, or the monitoring results of recovery plan implementation.
- Actions required by DOE, including GFS/I and DOE decisions.
- Pertinent business structure information.

Monthly, or as otherwise agreed to by DOE, the Contractor shall conduct project reviews with DOE and be prepared to address the information in the monthly report, as well as other information requested by DOE.

RPIP project reports shall be included in the Contractors Project Monthly Report. For projects, this section shall include progress to date, and EVMS data including variance analysis, progress and accomplishments, issues, risks, and a 90 day outlook. For multi-year projects, the reporting shall include fiscal year to date progress as well as contract to date progress. For RPIP projects, the Contractor shall brief DOE on project progress, schedule and cost variances, risk, issues, and recommendations and highlight GFS/I issues within three (3) weeks of performance data becoming available.

C.4.12.6.5.3 Performance Data Management

The Contractor shall:

- Provide management and technical information.
- Ensure a programmatic incorporation and integration of Program and Project Performance Management.
- Enable DOE to meet the data requirements of the DOE Integrated Planning, Accountability, and Budgeting System.
- Ensure transparency in program and project performance and efficiency in program execution.
- Support audits evaluations.
- Support other DOE performance assessment and information needs.
- Plan work through completion.
- Delineate scope into manageable pieces for control of scope, schedule, and cost objectives within established roles and responsibilities.
- Integrate scope, schedule, and cost objectives into a plan by which accomplishments are measured.

- Objectively measure and analyze Contract work activities including, but not limited to, O&M activities.
- Manage work activities to their definable scopes of work, costs, schedule plans, milestones, and performance metrics.
- The IIP shall provide the scope, cost, schedule plans, milestones, and performance metrics.

C.4.12.6.6 Risk Management

C.4.12.6.6.1 Programmatic Risk Management

The Contractor shall implement a risk management process and submit a Risk Management Plan to DOE for approval.

The Risk Management Plan shall also specify:

- Use of probabilistic risk analysis using Monte Carlo simulation and identify when Monte Carlo simulations will be run;
- Probabilistic risk analysis with sufficient analytical information to establish cost and schedule confidence levels; and
- Recommended MR required to adequately address Contractor-controlled risk.

The Contractor shall utilize logic linked schedules compatible for use by DOE in conducting DOE project risk management assessments and analysis. The Contractor's identified project risks shall be linked to the activities in the schedule.

Risk and decision management activities shall be coordinated on a continuing basis with DOE and OHCs. Contractor risk analysis information pertaining to cross-cutting decisions shall be communicated to DOE and OHCs, including agreement as to who should have the risk management lead for each risk.

C.4.12.6.6.2 Project Risk Management

The Contractor shall implement a risk management process and submit a Project Risk Management Plan to DOE for approval. The Project Risk Management Plan shall be in alignment with the Contractor's Program Management Plan.

The Project Risk Management Plan shall specify the use of probabilistic risk analysis using Monte Carlo simulation and identify when probabilistic risk analyses will be run. At a minimum:

- Probabilistic risk analyses shall be performed to identify the MR recommendation required to adequately address Contractor-controlled risk for each project in the RPIP. These analyses shall be performed when a project enters the three (3) year "rolling wave", and whenever a significant baseline change occurs.
- The process for identifying and handling key project risks shall be identified.
- The Contractor shall utilize logic-linked schedules compatible for use by DOE in conducting DOE project risk management assessments and analysis. The Contractor's identified project risks shall be linked to the activities in the schedule.

C.4.12.6.6.3 Risk Register

Risk Register Information is required from contractors, regardless of activity type (Operational Activity or Project). Consistent Risk Information shall be provided to DOE on a quarterly basis in spreadsheet (such as Microsoft Excel[®]) or database format and shall be reported monthly to DOE with the Project Monthly Performance Report including:

- Risk Identification Number;
- Risk Title;
- Risk Description;
- Risk Dates:
 - Identification Date, and
 - Closure Date.
- Risk Type or Grouping (e.g., regulatory, technical, performance, site condition);
- Level 1 WBS;
- Sub-Project or Operational Activity;
- Probability (percentage range and basis);
- Risk Impacts (and basis):
 - Incremental cost, and
 - Schedule (days).
- Key/Critical Risk;
- Status (Open or Closed);
- Basis for Closure;
- Realized risk impacts:
 - Incremental cost incurred from responding to risk realization, and
 - Schedule impact (days) resulting from realization.
- Response Type (Accept, Control, Transfer, Avoid, Share, Enhance);
- Response Plan/Mitigation;
- Risk Owner;
- Response Plan/Mitigation Cost and/or Schedule and basis for estimate; and
- Risk Triggers.

C.4.12.6.7 *Project Management*

This Section applies to capital asset construction activities performed as part of executing this Contract. In the context of this section, the terms “acceptance testing” and “acceptance” refer to the Contractor’s testing and acceptance of Contractor-related systems and equipment. The Contractor shall provide the necessary documents to support the critical decision (CD) process.

C.4.12.6.7.1 Project Planning

Development of the life cycle baseline for the portfolio of projects captured in the RPIP varies from year to year and depends on needs defined by the various programs and larger projects at Hanford both within and outside of this Contract. Regardless of the source, identification of these needs (sometimes referred to as “mission” needs) shall follow Program and Project Management principles where the need for the project is documented.

The listing of projects shall be captured and prioritized in the RPIP as described in the RPIP Management Plan. The Portfolio of projects is a subset of the IIP; therefore, the requirements of the overall scope development and IIP management apply to the RPIP. As requested by the DOE, the Contractor shall support RPIP scenario development to support the DOE budget process.

The Contractor shall manage the portfolio of projects according to the RPIP Management Plan to ensure appropriate project sequencing and integration. NEPA shall be addressed early in the life cycle planning of modifications or upgrades. In addition, requirements under the NEPA are better addressed at the portfolio level.

In addition to requirements for baseline management located elsewhere in this solicitation, the Contractor shall develop a performance management baseline for the portfolio of projects that reflects a three (3) year window “rolling wave” concept that captures life cycle planning information for project work that begins within the window. The planning shall account for and integrate project and related program decisions and activities and clearly note where the Contractor requires DOE support (GFS/I).

As a subset of the IIP and CPB, the RPIP projects will be authorized and managed jointly with DOE utilizing a three (3) year “rolling wave” of project starts. The RPIP MP shall describe how the life cycle planning for each of the RPIP projects will be reflected and managed for projects that are expected to start within this three (3) year rolling window. Life cycle planning for project starts beyond the rolling window may be provided at a summary level of detail for planning purposes. The level of planning shall be adequate to inform the planning and budgeting system (e.g., advance notification to the budget process for projects that are expected to be CAPs within the upcoming two [2] years).

The CPB for Reliability Projects is part of the larger CPB. In addition to general CPB requirements, the CPB associated with Infrastructure Reliability Project schedule shall:

- Include applicable external interfaces, Contractor’s TPA milestones, and other regulatory and DNFSB commitments, and GFE or information dependencies.
- Be an integrated, logical network-based plan that correlates to the WBS, is vertically traceable to the control accounts, and successfully aligns the Contractor’s schedule. The schedule shall be capable of summarizing from control accounts to higher WBS levels, and may contain other discrete activities agreed to by DOE and the Contractor.
- Include activities of a general or supportive nature associated with Infrastructure Reliability Projects that shall be logic linked in the schedules for those projects. Other activities of a general or supportive nature will be included in the Cost Baseline, but will be excluded from the schedule.
- Provide additional working level schedules deemed necessary by the Contractor, which shall be integrated with the RPIP CPB and able to provide a graded approach.
- Include project resource plans; detailed resource estimates; BOEs; budgetary requirements; and identification of direct costs, indirect costs, and MR.
- Identify, for each work package, the method used to measure performance, utilizing the “rolling wave” concept.

Development of the life cycle baseline for the portfolio of projects captured in the RPIP varies from year to year and depends on needs defined by the various programs and larger projects at Hanford both within and outside of this Contract. Regardless of the source, identification of RPIP needs (sometimes generally referred to as “mission” needs) shall follow Project and Program Management principles, where the need

for the project is documented. This level of planning is expected to be developed and available for DOE review to support funding decisions for the remainder of the project. Planning is then matured according to the management principles. This comprehensive planning system shall be reflected in the Program Management Plan, as appropriate.

The Contractor shall ensure that operations activities related to both program and projects consider connected and cumulative actions when evaluating compliance actions.

C.4.12.6.7.2 Project Integration

The Contractor shall describe program and project integration and their interfaces in the RPIP Management Plan. The Plan shall:

- Describe the part of the organizational breakdown structure that has responsibility for project formulation deliverables, project initiation documentation, and decisions to support the programs.
- Describe how integration between programs and projects will be accomplished for the duration of the project through project closeout, and transition/turnover to operations.
- Describe how programs define and document project mission need and scope, prioritize and integrate the projects for funding, execute the projects utilizing the appropriate level of project management and DOE interface, and transition/turnover/closeout projects. Involvement of, and leadership by, separate engineering organizational elements in the various phases of project management shall also be described in the Plan.
- Describe how environmental requirements and regulatory interfaces will be addressed at the various phases of the project.

C.4.12.6.7.3 Project Initiation

Projects on the RPIP shall be defined by a documented and traceable gap in capability (a difference in the current state versus a desired state). Example documentation may include, but is not limited to, documented forecasts of additional or change in system capability, condition assessments, operations performance trends, maintenance trends, risk mitigation, emerging technology that represents new or revised capabilities or system improvements that offer life cycle cost benefits over an older system, or emergent items.

Mission and crosscutting programs and projects at Hanford are responsible for developing, revising, and executing strategies to meet the various end states at Hanford, and these involve common infrastructure items for the Site. Since programs and projects for cleanup at Hanford are often acquired through multiple contracts and involve two (2) Field Offices, the collection of needs through various mechanisms may need to be tailored. The gap in capability does not specify an alternative to fill the gap, but identifies a range of possible solutions with an associated cost range and expected timeline. This documentation shall be in place through the IIP submittal prior to DOE authorization of the project. For projects following the CD process, and the documentation shall be included in the CD-0, *Justification of Mission Need*.

The following documents are expected to be available at the time of the IIP submittal as part of the basis to authorize RPIP project starts:

- Justification of mission need (including applicable technical basis documents);
- Functions and requirements;
- Scope statement;

- Cost range;
- NEPA screening documentation;
- Preliminary project timeline including known key decisions or support required by DOE; and
- Other relevant documentation (can be referenced) to define the pre-conceptual scope, cost range and timeline for the project (e.g., technical basis, trend studies, technology opportunity studies).

The documents containing the basis for individual projects shall be made available electronically or otherwise to the DOE as projects are added to the three (3) year “rolling wave” of project starts in the RPIP before the projects are initiated. Unless agreed to otherwise by the DOE, initial BOEs for the project shall be based on a range of project alternatives to meet the identified project need and include uncertainty associated with this level of project maturity. When alternatives to meet the projected need are analyzed, a more refined BOE is expected. The Contractor shall deliver this planning in advance to identify the basis and need for projects by performing the necessary related studies and evaluations as part of the life cycle baseline planning and development of the performance management baseline.

C.4.12.6.7.4 Project Design

Design Authority (DA): The Contractor shall act as the DA unless otherwise determined, with duties to include developing design solutions, preparing design media and documentation, maintaining the design basis, and performing design reviews.

Design Standards: The Contractor shall submit for DOE approval a list of the standards to be used in the design of facilities and equipment. The Contractor shall ensure that the project’s design meets applicable standards, and the list of applicable standards is maintained under configuration control. The Contractor shall integrate safety into the design process.

Design Reviews: The Contractor shall conduct periodic design, constructability, and operability reviews. When directed by DOE, the Contractor shall facilitate independent DOE design reviews, to demonstrate that the project will perform its intended functions and meets requirements. The Contractor shall provide the design at the end of the three (3) design stages (conceptual, preliminary, and final), or as otherwise directed by DOE, for DOE review. The Contractor shall resolve comments resulting from these reviews with DOE.

Release for Construction: Upon receipt of CD-3, *Approve Start of Construction*, and resolution of DOE comments, DOE will authorize the Contractor to release the design for construction.

C.4.12.6.7.5 Project Procurement

The Contractor shall:

- Prepare and submit a Procurement, Construction, and Acceptance Testing Plan for DOE approval and update the Plan as required after initial submission. The Plan shall include:
 - Description of procurements, construction bids, and work packages;
 - Construction management;
 - Construction Site management;
 - Acceptance testing; and
 - Descriptive linkage to the Project Execution Plan.

- Procure required material and equipment through the preparation of bid packages and solicitations; evaluating, awarding, and managing subcontracts; accepting subcontractor materials and equipment; and verifying subcontractor acceptance tests.
- Submit a Purchasing System for DOE approval.
- Certify to DOE that construction has been initiated.

C.4.12.6.7.6 Project Construction and Acceptance

The Contractor shall maintain a Construction Inspection System and Acceptance Testing System, perform inspections and testing, and ensure that the work performed under this Contract conforms to Contract requirements. The Contractor shall maintain complete inspection and testing records and make them available to DOE. DOE may elect to use independent acceptance inspectors to participate in acceptance testing and system turnover. The Contractor shall develop and submit an integrated Construction and Acceptance Testing Program to DOE for approval that includes the following elements:

- Verification and approval of vendor's shop drawings to ensure conformity with the approved design and working drawings and specifications.
- Acceptance test plans and procedures for onsite Contractor/subcontractor inspection of construction workmanship, compliance with design drawings and specifications, management of the design construction changes, and criteria for acceptance of fabricated and constructed items.
- Integrated construction acceptance test plans and inspection of construction to ensure adherence to approved working drawings and specifications.

The Contractor shall prepare for DOE review and approval an As-built Program Description. The as-built process and associated procedures shall identify:

- Description of the as-built process, including the role of DOE and the Contractor (Contractor shall participate in acceptance of the as-built design, following construction, and commissioning);
- Drawing series to be as-built;
- Document control process for maintaining as-built; and
- Procedures for modification of the as-built.

During the construction and acceptance phase, the Contractor shall remain current on the process and facility as-built program. The Contractor shall report the status of the as-built program in accordance with the process defined in the Procurement, Construction, and Acceptance Testing Plan.

The Contractor shall provide the necessary labor, equipment, materials, test equipment, and spare parts sufficient to maintain all SSC in an operable condition, and other related resources for the acceptance testing program.

The Contractor shall certify to DOE that facility acceptance has been completed. Completion of facility acceptance is defined when the components and systems associated with the facility have been installed, functionally tested and the facility design as-built documents are complete in accordance with the Procurement, Construction, and Acceptance Testing Plan. Facility acceptance shall require acceptance of components and systems, including as-built design drawings.

DOE and OHC staff identified by DOE, shall be invited to participate in construction project overview activities. Construction overview activities include any meeting that discusses significant issues associated with the establishment, development, and/or progress of the construction activities.

Boundaries, Constraints, and Interfaces: None.

C.4.12.7 Hanford Portfolio Analysis, Project Support and Independent Assessment

Successful execution of the Hanford portfolio analysis, project planning, and independent assessment work scope will directly facilitate DOE's ability to make informed decisions and ensure cost and schedule efficiency while minimizing programmatic risks, initiating new sub-projects, and providing independent assessment and oversight of the environmental cleanup activities. The Contractor is responsible for assisting DOE in performing Sitewide portfolio analysis functions.

C.4.12.7.1 Hanford Portfolio Analysis

The desired outcome of the Hanford Portfolio Analysis, Project Support, and Independent Assessment function is to enable DOE to ensure cost and schedule efficiency while adequately anticipating and managing programmatic risk.

Scope and Requirements

This scope is primarily accomplished through integration and critical analysis of DOE and contractor scope, budget, project and program information, and formulating programmatic recommendations to DOE.

The Contractor shall:

- Perform Hanford Site Portfolio Analysis and assessment through integration with OHCs where appropriate.
- Provide simulation and optimizing analysis tools, and coordinate and assist with integrated analysis, scheduling, and performance evaluation. The Contractor shall:
 - Develop a Hanford Site WBS that will be approved by DOE and implemented into the BMS. Specifically, the Contractor shall meet with DOE and develop a Site WBS Plan that meets DOE's requirements, schedule and approval process. After plan approval by DOE, the Contractor shall create a Hanford Site contractor team consisting of members from OHCs to achieve a Site WBS. The desired outcome is a Hanford Site-wide enterprise-level scope management system to control change to the WBS, and produce the WBS Index, WBS Charts, and WBS Dictionaries that define, at a high level, what is to be procured. The Program WBS is used by DOE to develop a Contract WBS to the desired reporting level.
 - Provide a Hanford Site Life Cycle Cleanup Program Baseline with standardized scope, cost, and schedule managed under an integrated scope, cost, and schedule change control process.
 - Provide a PIMS consisting of the individual contractor Integrated Master Schedules and DOE's Cleanup Program Baseline.
 - Provide an enterprise level cost estimating system that supports the development of Government estimates for Program Baseline development, acquisition, and contract modifications.
 - Provide a scheduling system and ongoing administration of the P6 licenses and databases.

- Support the DOE budget formulation process (DOE is the lead on this activity, and the Contractor is in a support role only). These activities may include, but are not limited to the following activities: the emerging work items list, helping to develop budget formulation input, maintaining the Integrated Priority List (IPL), assisting in the fall limited budget update submission, supporting budget scenario development and budget presentations (such as public and regulatory briefings).
- Facilitate the development of a Hanford Site WBS (includes the large prime contracts to DOE) that will be used in the PMBs, Annual IPLs, budget requests, environmental liability report, life cycle cost reports, and integrated into the BMS for reporting and collection of costs. DOE will provide the Contractor direction on which contracts will be included, and DOE will provide OHC direction to provide the information. OHCs directed by DOE will be responsible to provide the Contractor with a WBS that meets their respective contract requirements and strategy.
- Ensure the framework for the Hanford Site WBS meets funding demands, budget requests, and the EM WBS requirements.
- Maintain historical basis and crosswalk of prior contractor's WBS(s), following implementation of the new Hanford Site WBS.
- Utilize standards in MIL-STD-881C, *Department of Defense Standard Practice: Work Breakdown Structures for Defense Material Items*, to standardize the Hanford WBS across the PBSs.
- Submit to DOE, for approval, a Hanford Site WBS down to the control accounts and WBS Dictionaries at the fourth level.
- Develop processes and procedures to manage change to the Hanford Site WBS.
- Support DOE in developing and enhancing the scope descriptions, assumptions, requirements, deliverables, constraints, and completion criteria that comprise the Hanford Site WBS Dictionaries.
- Evaluate and propose new tools or enhance existing tools to manage change to the Hanford Site WBS, and provide DOE the WBS Index, WBS Charts, and WBS Dictionaries.
- Work with OHCs to develop the Hanford Site WBS and provide to DOE for review and approval. Provide the following products for DOE's approval in accordance with the schedule below:
 - Draft Hanford Site WBS – 90 days after last contract transition has concluded, unless DOE has provided other direction.
 - Final Hanford Site WBS – 180 days after last contract transition has concluded, unless DOE has provided other direction.
 - Hanford Site WBS IP of WBS – 270 days after last contract transition has concluded, unless DOE has provided other direction.
 - Final Hanford Site WBS package – 360 days after last contract transition has concluded. Final package includes IP, Hanford Site WBS (down to control accounts), WBS Index, WBS Charts, WBS Dictionaries, and Yearly update plan.
- DOE will provide comments and approval 45 days after submittal of each contact deliverable. After the Final Hanford Site WBS package is approved, the Contractor shall ensure implementation of the WBS into the BMS and issue reports no later than two (2) years after the last contract transition.

C.4.12.7.2 Hanford Life Cycle Cleanup Baseline

The Contractor shall:

- Develop and maintain a Hanford Life Cycle Cleanup Baseline that:
 - Integrates the baselines and life cycle plans of the Contractor, and OHCs performing EM work and DOE direct-funded activities;
 - Identifies applicable regulatory requirements and current cleanup objectives;
 - Identifies Sitewide issues with schedule logic, integration, waste flow disposition pathways and planned sequencing, and provides recommendations for optimization;
 - Identifies and quantifies program risks in a Programmatic Risk Management Plan; and
 - Reflects waste disposition strategies and regulatory pathways including TPA, RCRA, CERCLA, AOP, National Pollutant Discharge Elimination System, ESA, NHPA, ARPA, NEPA, NRDA, Toxic Substances Control Act, and Superfund Amendments and Reauthorization Act that must be negotiated and approved in advance to support future acquisitions and incorporates approved baseline changes into the Plan.
- Develop an integrated scope, cost, and schedule change control system for maintaining the Program Baseline and provide DOE the following:
 - Program Baseline Integrated Change Control System Description;
 - Change Control Process;
 - Configuration Control Board Charter; and
 - Program Baseline standards for scope, cost, and schedule.
- Maintain the Change Control Log.

As requested, the Contractor shall:

- Evaluate project and program performance against the Hanford Life Cycle Cleanup Program Baseline. For the purpose of identifying cost and schedule impacts and providing accurate status against the integrated life cycle cleanup plan, determine the effects of:
 - Individual contractors' performance against the respective contract baselines;
 - DOE project performance against the DOE project baselines;
 - DOE program performance against the DOE Integrated Planning, Accountability, and Budgeting System baseline; and
 - Individual contractor and Sitewide performance to regulatory requirements and milestones.
- Identify performance issues with respect to schedule logic, integration, waste flow disposition pathways planned sequencing, milestones, interface points, regulatory commitments, risk mitigation, and incentives, and provide recommendations for optimization.
- Compile performance reports accompanied by critical analyses and recommendations to DOE.
- Develop and maintain the PIMS in accordance with the NDIA PASEG that consists of the individual contractor integrated master schedules and DOE's Cleanup Program Baseline. The PIMS supports

rollup of progress from individual contractor baselines to the Hanford Life Cycle Cleanup Program Baseline, evaluation of site-wide performance against cleanup program objectives, and scenario development.

- Develop and maintain a PIMS Supplemental Guidance document that clarifies and specifies the uniqueness of the program approach at Hanford.

Other Analyses, as requested (funded on an as-needed basis via Portfolio Analysis task orders)

- Perform mission needs analysis and identify strategic or project integration gaps in mission execution capabilities, as requested. Ensure this analysis is fully integrated with other Hanford Site specific plans (e.g., ISAP, DOE Ten Year Plan).
- Identify approaches to reconcile TPA requirements with Congressional funding levels and the current and projected performance, as requested.
- Develop presentations and reports, including year-end and quarterly Sitewide Progress Reports for DOE-HQ and the public, and a year-end summary and quarterly updates for Sitewide attributes of the (DOE) corporate performance measures, and Site Plans, as requested by DOE.
- Support DOE in the preparation and submission of documents requesting regulatory and stakeholder approval (e.g., EVMS certifications; Evaluations of contractors' estimates, scope, cost and schedules; Requests for Equitable Adjustments and BCRs).
- Evaluate and respond to externally-proposed or required changes in technical scope, schedule, regulatory or budget requirements.
- Maintain the P6 scheduling tool and administer the P6 licenses and databases.
- Perform risk analysis to identify possible risk mitigation actions and to determine the TPC and schedule end date for CAP performance baselines.
- Develop risk management plans.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints:

- Supports the optimization of cleanup planning to DOE-defined criteria as part of the annual budget planning and funding decision-making process, via tools such as the IPL, integrated, cross-cutting analysis of mission contractors' baselines, opportunities, and risks.
- Under Portfolio Analysis, Other Analysis (as requested), these functions are conducted on an as-needed basis via Portfolio Analysis task orders. This service capability may not need to be sustained on a continuous basis. It is not expected the resources necessary to execute these functions will be retained as a permanent operating capability; rather, resources will be obtained when DOE identifies a need and funding is available.

Interfaces: None.

C.4.12.7.3 Project Support

The desired outcome is dependent upon the end product required, such as a fully developed and awarded project contract, or a complete project, from initiation to turnkey delivery. The result is a flexible

acquisition capability that yields well-conceived, technically sound, and successfully executed projects. Timely access to highly competent and capable specialists that can perform this work is imperative.

Scope and Requirements

The Contractor shall provide the means to enable DOE to perform its project management responsibilities, in the areas of project planning, acquisition, and execution.

The Contractor shall, as requested, on a Portfolio Analysis task-order basis, perform project support functions in the areas of project planning, acquisition, and execution, such as, but not limited to, preparing draft CD packages required by CRD O 413.3B, perform engineering study and analyses, conduct acquisition planning, develop independent cost estimates, conduct design reviews, provide engineering during construction and construction management, perform acceptance inspection.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints:

Project Support functions are conducted on an as-needed basis through task orders. This service capability may not need to be sustained on a continuous basis. It is not expected the resources necessary to execute these functions will be retained as a permanent operating capability; rather, resources will be obtained when DOE identifies a need and funding is available.

Interfaces: None.

C.4.12.7.4 Independent Assessment

The desired outcome is timely access to highly competent and capable specialists that are able to conduct thorough analyses and verification of project or mission-related work requirements, and provide sound recommendations for project and/or contractor improvements.

Scope and Requirements

The Contractor shall:

- Provide a capability for ensuring that work is accomplished in accordance with ESH&Q requirements, to perform special DOE studies, and obtain recommendations on an as needed basis to resolve technical and regulatory issues. It is not expected the resources necessary to execute these functions will be retained as a permanent operating capability; rather, they will be obtained when DOE identifies a need and funds are available.
- Provide specialty technical expertise, on a Portfolio Analysis task-order basis, for areas such as, but not limited to, value engineering studies, project management, project controls, cost estimating and scheduling, ESH&Q compliance, verification of cleanup, and radiological clearance.
- Provide technical support services (e.g., collection and analysis of field samples) as needed for the verification of compliance with specified ESH&Q requirements.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints:

- Other than internal standard business process (self) assessments the Contractor performs of itself, the Contractor will not be tasked to perform “independent” assessments of the Contractor, as these will be performed by a third party.

- Independent assessment functions are conducted on an as-needed basis through task orders. This service capability may not need to be sustained on a continuous basis. It is not expected the resources necessary to execute these functions will be retained as a permanent operating capability; rather, resources will be obtained when DOE identifies a need and funding is available.

Interfaces: None.

C.4.12.7.5 Outgoing Contract Transition

At the completion of the Contract, or portion(s) of the Contract, the Contractor shall cooperate with DOE and assist the incoming contractor(s) to facilitate an overall effective and seamless Contract 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.

The Contractor shall perform the following activities for transition resulting from the Contractor transferring responsibility for performing work scope to another contractor:

- Ensure that 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.
- Assess the current conditions of elements of the PWS associated with the scope of work being transferred and provide DOE with a report presenting this assessment.
- 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.

CLINs 0005, 1005, 2005 – DOE Small Business Procurement Pre-Award Support

C.5 DOE Small Business Procurement Pre-Award Support

DOE plans to set aside meaningful work (as defined in the H Clause entitled, *Subcontracted Work*) that shall be awarded to small businesses as prime contracts to DOE beginning in year two (2) of the Contractor's performance. The terms for these small business contracts are anticipated to be a five (5) year period of performance. These contracts should be Fixed-Price, unless other contract types can be justified as best value for the Government, and should consider the appropriateness of an Indefinite Delivery/Indefinite Quantity (IDIQ) arrangement to adapt to funding fluctuations and changing priorities. DOE may request the Contractor to identify additional scope for awards to small businesses as direct contracts to DOE throughout the term of the Contract.

The desired outcome includes an approved Small Business Prime Contract Acquisition Plan, an approved Small Business Procurement Support to DOE model, and DOE awards of a set of prime contracts to small businesses.

Key Customer

- DOE

Scope and Requirements

In year one (1) of Contract performance, unless otherwise directed by the DOE CO, the Contractor shall identify meaningful work, (as defined in the H Clause entitled, *Subcontracted Work*), from the HMESC PWS, that shall be awarded to small businesses as prime contracts to DOE. The Contractor shall submit a Small Business Prime Contract Acquisition Plan for DOE approval that provides a description of the meaningful work scopes (as defined in Section H entitled, *Subcontracted Work*) to be awarded as small business prime contracts to DOE, to include anticipated contract types, terms, estimated contract value by year for each small business prime contract, schedule and other applicable details required for DOE to award the contracts. The Contractor shall develop a Small Business Procurement Support to DOE model for DOE approval in year (1) one of Contract performance that clearly delineates the Contractor's roles and responsibilities and the communication approach with DOE officials in each of the phases of acquisition and contract administration. This business model shall be consistent with the requirements in the Competition in Contracting Act, FAR, DEAR, DOE Acquisition Guide, applicable Acquisition Letters (AL), and other applicable regulations and DOE Orders. Under this approach, the Contractor shall provide professional, paraprofessional, and clerical services to DOE for pre-award, data verification and data entry.

Contractor's assistance to DOE with the pre-award functions shall be on a non-inherently governmental function basis in accordance with FAR 7.5, *Inherently Governmental Functions*. DOE AL 2015-07, *Performance of Inherently Governmental and Critical Functions*, and Office of Federal Procurement Policy (OFPP) Letter 11-01, *Performance of Inherently Governmental and Critical Functions*, are included in Section J Attachment entitled, *Requirement Sources and Implementing Documents*, as guides.

The Contractor shall as appropriate in accordance with the above stated requirements:

- Assist DOE in performing appropriate aspects of the procurement process leading up to DOE awarding the identified scope elements to small businesses in a timely and efficient manner.
- Assist DOE in drafting appropriate portions of solicitations with appropriate federal requirements.
- Assist and collaborate with DOE to ensure required documentation (e.g., specifications/description, brand name/sole source) is received and acceptable for procurement actions.
- Work closely with and assist the DOE CO(s) and designee(s) to ensure the procurements are prepared and executed in a manner that accurately represents the Government's needs and is in the Government's best interest.

Boundaries, Constraints, and Interfaces

Boundaries, Constraints and Interfaces: None

CLINs 0006, 1006, 2006 – Usage-Based Services to Be Provided to Other Hanford Contractors

C.6 Usage-Based Services to Be Provided to Other Hanford Contractors

The Contractor shall provide the services identified in Section J, Attachment J-3.a, after completion of Contract transition, until directed by the DOE CO to execute to the Section J, Attachment J-3.b, identifies the service type as either mandatory or optional for use by Hanford Site customers, including DOE and/or OHCs and their subcontractors. Changes to the Matrix shall be signed, showing concurrence, by the

Contractor and OHCs. UBS are a pass-through cost for OHCs; the accounting for the obligation of DOE funds and cost reimbursement for UBS is described in Section B entitled, *Supplies or Services and Prices/Costs*, under the UBS To Be Provided to OHCs CLINS.

CLINS 0007, 1007, 2007 – Infrastructure Reliability Projects

C.7 Infrastructure Reliability Projects

The Contractor shall develop an RPIP, as a subset of the IIP as described in Section C entitled, *Project Management*. The RPIP is work related to updating, upgrading or replacing elements of the fixed infrastructure and removing and/or dispositioning newly abandoned or replaced systems.

The management of the RPIP shall be performed under Section C entitled, *Project Management*. As funds become available and the need for these projects arise, DOE will issue task orders under the ID/IQ CLINS 0007, 1007, 2007.

CLINs 0008, 1008, 2008– DOE Small Business Procurement Post-Award Support and Other Directed Work Scope

C.8 DOE Small Business Procurement Post-Award Support and Other Directed Work Scope

The small business procurement post-award support and other DOE directed work scope (DDWS) activities provides support to DOE and/or other entities. As funds become available and the need for these activities arise, DOE will authorize work via task order or task order modification under the IDIQ CLINs 0008, 1008, and 2008. These authorizations will vary in form and format depending on the nature of the work and the sponsoring entity. The work authorizations will identify scope, cost, schedule, fee, and funding arrangement.

C.8.1 DOE Small Business Procurement Post-Award Support

Key Customer

- DOE

The desired outcome is a smooth implementation of the DOE approved Small Business Procurement Support to DOE model that is compliant with the applicable regulations, DOE Orders, and ALs.

Scope and Requirements

In year two (2) of Contract performance, unless otherwise directed by the DOE CO, the Contractor shall provide contract administration support to DOE for the awarded small business DOE prime contracts.

The Contractor shall:

- Monitor awards DOE made to ensure products/services are provided in accordance with the Contract terms and conditions, and/or assist with modifications of the resulting contracts.
- Document contacts made with small businesses in efforts to resolve delinquency, to include but not limited to, the date, time, contacts, and content of conversation.

- Timely communicate with the DOE CO(s), CORs, or designee(s) issues or potential issues with the small business contractors' performance and make recommendations to DOE on means for resolutions.
- Review small businesses' invoices for completeness, accuracy, and compliance with contract requirements.
- Make recommendations to the DOE CO(s), CORs, and designee(s) for invoice payment or corrective actions.
- Coordinate and document past performance evaluations on awards and actions greater than \$150,000 for review by the DOE CO(s), CORs, and designee(s).
- Perform actions to support DOE in closing out expired small business contracts in accordance with DOE procedures and as directed by the DOE CO(s).

C.8.2 Other Directed Work Scope

Other DDWS is comprised of additional UBS activities that are provided by the Contractor, upon request, to sponsoring entities. These sponsors include DOE elements and other non-DOE sponsoring entities from federal, state, and local governments and agencies.

The desired outcome is a DDWS that is rigorous, but flexible, management process that maintains scope, cost, schedule, and funds control, regardless of sponsor requirements.

Key Customers

- DOE
- Other entities

Scope and Requirements

Multiple entities, both internal and external to DOE, may acquire services through this contract. Each acquiring entity has unique needs, and unique funding processes and accounting systems.

Entities acquiring DDWS may include, but are not limited to:

- DOE;
- PNNL;
- USFWS;
- DOT;
- Washington State National Guard Bureau;
- Energy Northwest; and
- Local and regional police and emergency response departments.

Authorization for DDWS may be in different forms and/or formats and include, but are not limited to, CO written direction (i.e., RFS), purchase orders and other similar mechanisms. Regardless of form or format, each authorization shall include:

- Title and description of the work, including the technical approach;
- Cost estimate broken down by type of cost—labor, material, subcontracts, or other (including fee, if eligible);

- Period of performance with schedule or plan of action with milestones;
- Funds management information, such as DOE accounting flex filed information, bank routing and account numbers; and
- Approvals of the sponsoring agency, Contractor, and CO.

The Contractor shall:

- Maintain a DDWS log of authorized work and update the log monthly. The log shall be available electronically to DOE staff. The log shall include the following information:
 - Activity title/description;
 - WBS number assigned to the activity;
 - Cost Account Charge Number assigned to the activity;
 - Cost Account Planning Number assigned to the activity;
 - PBS number funding the activity, if it is EM funded, otherwise the RFS, Purchase Order, or other sponsor-supplied identifier;
 - DOE Program Code, Project Code, and Local Use Code, if DOE funded;
 - Prior year uncosted funds if the task is ongoing;
 - Current fiscal year new budget authority;
 - Total available funding through the reporting period;
 - Authorized value of the activity;
 - Authorized fee for the activity;
 - Actual costs through the reporting period;
 - Remaining authorization ceiling (authorized value less actuals); and
 - Remaining funding (available funds less actuals).
- Perform the authorized work in accordance with the defined scope, cost, and schedule parameters identified in the work authorization documents.
- Review performance monthly with DOE for completeness, accuracy, and compliance with Contract requirements.
- Perform actions to support DOE in closing expired work authorizations.

Boundaries, Constraints, and Interfaces

Boundaries and Constraints: Contractor's assistance to DOE with the post-award functions shall be on a non-inherently governmental function basis in accordance with FAR 7.5, *Inherently Governmental Functions*. DOE AL 2015-07, *Performance of Inherently Governmental and Critical Functions*, and OFPP Letter 11-01, *Performance of Inherently Governmental and Critical Functions*, are included in Section J Attachment entitled, *Requirement Sources and Implementing Documents*, as guides.

Interfaces: None.