SECTION C
PERFORMANCE WORK STATEMENT

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C.1.0 GENERAL AND BACKGROUND INFORMATION

Established in 1989, the Department of Energy's (DOE) Office of Environmental Management (EM) is charged with addressing the environmental legacy of over 50 years of nuclear weapons production and government sponsored research. Since its inception in 1949, the Idaho Site has fulfilled numerous DOE missions including designing and testing nuclear reactors; reprocessing spent nuclear fuel to recover fissile materials; managing spent nuclear fuel; and storing, treating and disposing of various waste streams. Currently, EM is a tenant on the site, and the Office of Nuclear Energy (NE) is the landlord and maintains site-wide infrastructure.

The majority of EM's cleanup work at the Idaho site is driven by regulatory compliance agreements. The two foundational agreements are: the 1991 Comprehensive Environmental Response Compensation and Liability Act (CERCLA)-based Federal Facility Agreement and Consent Order (FFA/CO), which governs the cleanup of contaminant releases to the environment; and the 1995 Idaho Settlement Agreement (ISA), which governs the removal of transuranic waste, spent nuclear fuel and high level radioactive waste from the state of Idaho. Other regulatory drivers include the Federal Facility Compliance Act-based Site Treatment Plan (STP), and other environmental permits, closure plans, Federal and state regulations, Records of Decision (RODs) and other implementing documents.

The Idaho Cleanup Project (ICP) is funded through the DOE's Office of Environmental Management and focuses equally on reducing risks to workers, the public, and the environment and on protecting the Snake River Plain Aquifer, the sole drinking water source for much of eastern Idaho.

C.1.1 Contract Purpose and Objectives

The purpose of this contract is to safely accomplish as much of the remaining DOE Office of EM's cleanup mission at the Idaho Site as possible within available funding while meeting regulatory and legal requirements. The contract will apply performance-based contracting approaches and techniques. The ICP Core Contract (ICP Core) will require the Contractor to perform all work specified in the contract and to determine the specific methods of accomplishing the work. The Contractor shall comply with all Federal, State, and local laws and regulations, Executive Orders, DOE Orders (and other type of directives), Regulatory Permits, Agreements and Orders and Milestones with the regulators (both State and Federal) in the performance of this contract.

The ICP Core EM mission work encompasses ongoing Advanced Mixed Waste Treatment Project (AMWTP) and ICP work scopes that must continue into the future: completing treatment of the liquid sodium bearing waste, stabilizing and storage of spent nuclear fuel and high-level waste; dispositioning transuranic waste; retrieving targeted buried waste; closing the Idaho Nuclear Technology and Engineering Center (INTEC) tank farm; maintaining CERCLA remedial actions; and operating and maintaining the INTEC, Radioactive Waste Management Complex (RWMC), and the Radioactive Scrap and Waste Facility (RSWF) facility infrastructure. The scope of the ICP Core contract is specifically categorized per the following areas:

- Facility Infrastructure: This principally includes INTEC, RWMC, and RSWF facility infrastructure. The Office of Nuclear Energy (NE) is the Lead Program Secretarial Office (LPSO) at Idaho and manages site-wide infrastructure.
- Environmental Activities (CERCLA Remediation): This includes compliance with the Federal Facilities Compliance Act (FFCA) Site Treatment Plan (STP), Resource Conservation and Recovery Act (RCRA), CERCLA, and ISA activities principally at INTEC and RWMC; the Test Area North (TAN) groundwater remediation; new CERCLA site remediation; site-wide Stewardship; Idaho CERCLA Disposal Facility (ICDF) transition operations; and the INTEC Tank Farm closure.
- Waste Management: This includes Contact Handled (CH)-TRU waste management; Remote Handled (RH)-TRU waste management; Mixed Low Level Waste/Low Level Waste (M/LLW) activities/disposition; exhumed buried waste characterization and shipment; treatment and disposal of excess radioactive and hazardous materials (including sodium contaminated waste); and disposition of newly generated waste as needed.
- Spent Nuclear Fuel (SNF): This includes Spent Fuel transfers [Experimental Breeder Reactor (EBR II) and Advanced Test Reactor (ATR) fuels], Facility Surveillance and Maintenance, and SNF Receipt and Storage.

The DOE has numerous prime contractors that support ongoing activities at the Idaho site. The number of contractors and scope of the contracts may change during the period of performance of this Contract. During the term of this Contract, the ICP Core Contractor (herein referred to as "the Contractor") shall interface with the other site contractors. The Contractor shall establish Interface Agreements in accordance with Section 2.1 with the other Department of Energy-Idaho (DOE-ID) contractors, as required.

1. The Idaho Site landlord contractor conducting work for NE is referred to as "the INL contractor." The INL contractor is responsible for site-wide infrastructure. This requires that an Interface Agreement be established.
2. The Nuclear Regulatory Commission (NRC) contractor is responsible for providing services for management and operation of Spent Nuclear Fuel (SNF) storage facilities and licenses under NRC regulations. This requires that an Interface Agreement be established.
3. The Calcine Disposition and Spent Fuel Repackaging Architect and Engineer (A&E) contractor will be responsible for providing services to develop a path forward for waste calcine disposition and to ensure regulatory compliance. The Calcine Disposition Project (CDP) contractor will also perform pre-design and design of the CDP along with development and submittal of the Best Demonstrated Available Technology (BDAT) petition to the Environmental Protection Agency (EPA) for the Hot Isostatic Press (HIP) process. The CDP contractor will also perform pre-design and design for a receiving, packaging and shipping facility for Spent Nuclear Fuel with a focus on repurposing an existing facility. This requires that an Interface Agreement be established.
4. The Construction/Decontamination and Decommissioning (D&D) contractor will be responsible for performing the Idaho CERCLA Disposal Facility (ICDF) operations, Accelerated Retrieval Project (ARP) IX construction, Tank Farm interim cap

construction and Integrated Waste Treatment Unit (IWTU) strip-out. This requires that an Interface Agreement be established.

C.1.2 Goals and Objectives

The Idaho site works to ensure goals described in the DOE- EM, "DOE Office of Environmental Management FY14 Annual Performance Agreement," Section J, Attachment J-6, are supported. The goals that are pertinent to this Performance Work Statement (PWS) are:

Goal 1: Improve safety, security and quality performance towards a goal of zero accidents, incidents, and defects and continue to improve the EM Complex-Wide Safety Culture.

Goal 2: Continue cleanup progress in a cost effective manner that is risk-informed, engages stakeholders, applies innovative solutions and provides value to the American taxpayer.

Goal 3: Improve management of contracts and projects/operations activities with the objective of delivering results on time and within cost.

Goal 4: Achieve excellence in leadership and resource management by championing financial stewardship, integrating business processes, optimizing EM culture change, and improving communications with the objective of enhancing accountability and achieving performance results.

Goal 5: Execute the EM Mission in a Sustainable Manner.

The Contractor shall support and implement actions in furtherance of the performance agreement and achievement of the above goals as they relate to the ICP Core activities.

C.1.3 Format and Structure

The PWS includes ten sections. Sections C.1.0 and C.2.0 contain the introduction information and transition requirements, which are relevant to the entire scope of the Contract. Sections C.3.0, C.4.0, C.5.0, C.6.0 and C.7.0 contain the technical requirements for the specific EM Facility Infrastructure; CERCLA Remediation; Waste Management; Liquid Waste Facility Infrastructure; and Spent Nuclear Fuel Surveillance, Maintenance and Stabilization, respectively. Section C.8.0 contains general program management and support requirements, which are relevant to the entire scope of the Contract. Section C. 9.0 addresses the list of applicable deliverables and Section C.10.0 incorporates the list of applicable exhibits, which are also relevant to the entire scope of the Contract.

C.2.0 GENERAL TRANSITION SCOPE

During the transition period, as specified in the Section F clause entitled, *Period of Performance*, the Contractor shall perform those activities that are necessary to transition work from the INL and the previous ICP and AMWTP contractors in a manner that: (1) ensures that all work for which the Contractor is responsible under the contract is continued without disruption; (2) provides for an orderly transfer of resources, responsibilities, and accountability from the previous contractor; and (3) provides for the ability of the Contractor to perform the work in an efficient, effective, and safe manner. Workforce transition shall be managed in accordance with the requirements of any and all applicable Section H, Contractor Human Resource Management clauses, within the contract transition period, which is estimated to be 90 days. The first day of the Transition Period will be the date of the issuance of the Notice To Proceed (NTP). The contract effective date is the date the Contractor shall assume full responsibility.

The Contractor shall establish the necessary logistical support (office space, computers, telephone, etc.) to execute transition and shall ensure all necessary personnel, including key personnel for the Contractor, are on-site during the transition period, unless specifically directed otherwise by the Contracting Officer (CO). During the Transition Period, the Contractor shall brief workers, Federal staff, and stakeholders on the Contractor's approach and commitments for accomplishing the PWS.

Transition Plan and Other Transition Activities

The Contractor shall submit a Transition Plan for DOE approval within 14 calendar days after the issuance of the NTP. The Transition Plan shall cover the necessary activities during the transition period from Contract NTP date to the Contract effective date. The plan shall provide sufficient detail for all transition activities, including but not limited to: the transition schedule, a description of all necessary transition activities, coverage of key functional areas during the transition period, the planned strategy for developing required documents (including licenses and agreements), a brief description of all involved organizations, planned execution of Interface Agreements with other DOE-ID site contractors and necessary Memoranda of Understanding (MOUs) with outside support organizations (e.g. NRC, Bureau of Land Management (BLM), etc.), required utilities and other transition activities such as acquisition of necessary equipment, hiring and training of personnel, and development or revisions of required plans and procedures. The objectives of the Transition Plan are to prepare for implementation of the contract and minimize the impacts on continuity of operations. The Contractor shall perform due diligence to ensure that all transition activities are identified and completed during the Transition Period.

The Contractor shall establish any Interface Agreements necessary between it and other DOE-ID site contractors/subcontractors to define necessary interface points, scope boundaries, and/or provision of services, as required. A purchase order, subcontract, or other contracting vehicle between the contractors may dually serve as the necessary Interface Agreement where appropriate. The Contractor shall provide informational copies of all Interface Agreements to DOE as they are established.

To ensure continuity of operations, the Contractor shall adopt the incumbent contractors' programs and procedures at NTP (e.g. Safety Analysis Report (SAR)s, Technical Safety Requirement (TSR)s, operating procedures, etc.), provided the Contractor has formally reviewed the programs and procedures to ensure compliance with Contract requirements, current regulatory requirements, DOE Orders and directives, and the Contractors' organizational roles and responsibilities. The Contractor shall revise those programs and procedures it deems necessary to accommodate their technical approach, provided the programs and procedures remain in compliance with DOE requirements, and shall maintain its plans, procedures, programs, etc. in accordance with this PWS.

Status Reports - Transition Activities

The Contractor shall provide weekly status reports of transition activities to DOE. The Contractor shall establish routine status meetings with DOE and other affected contractors to review transition activities and issues. The frequency of the meetings may increase as the end of Contract transition period approaches. The Contractor shall coordinate directly with DOE-ID, and other organizations and contractors to finalize any transition agreements required to assume full responsibility.

DOE Safeguards and Security Survey

During the Contract transition period and prior to assuming control and responsibility for Safeguards and Security (SAS), the Contractor shall be subject to a DOE SAS initial survey conducted in accordance with U.S. DOE Order 470.4B, Admin Change 1, Safeguards and Security Program. The results of the survey shall be documented and form the basis for DOE authorization to assume SAS responsibilities, in particular, responsibility for Special Nuclear Material (SNM) and classified information. Following the receipt of DOE authorization, the Contractor shall assume responsibility at the contract effective date for all applicable SAS resources, materials, facilities, documents, and equipment within the facilities for which the Contractor is responsible.

Assumption of Permits

In accordance with Section H clause entitled *Allocation of Responsibilities for Contractor Environmental Compliance Activities*, the Contractor shall submit to DOE and/or the regulator, as required, no later than 30 days prior to the contract effective date, certified permit modification requests per Exhibit C-1 *List of Current Environmental Permits Applicable to EM INL Site Work Scope* (e.g., site-wide level RCRA permits, EM facility-specific air permits, and EM facility-specific Waste Water Land Application permits) to assume ownership (i.e., change the "operator" name and identify a "responsible corporate officer" responsible for the permit).

Mandatory and Optional Site Services

By contract effective date, the Contractor shall establish a formal interface agreement with the INL contractor describing how the mandatory and optional site services per Exhibit C-2 will be performed and reimbursed throughout the ICP Core contract period.

C.3.0 EM FACILITY INFRASTRUCTURE

General Infrastructure support is provided by the INL contractor to the Contractor at no cost over the five-year contract period of performance. The INL contractor maintains site roads including snow removal, weed control, lighting, and sign maintenance up to the main gate of the EM-owned site areas and facilities, as well as the parking lot outside of the main gate entrance at the INTEC and RWMC facility areas. The INL contractor maintains and inspects the existing railroad system up to the EM facility perimeter fence or area boundary. The INL contractor maintains other site grounds that are outside of the EM facility areas and outlying EM facilities and structures. The INL contractor will maintain the site seismic monitoring network.

The Contractor shall operate and maintain the EM-owned buildings and structures at the INL site listed in Exhibit C-3 *List of ICP Core EM Buildings and Structures*. The Contractor shall assume that with proper maintenance, no critical equipment failures (cranes, PaRs, fuel casks, box lines, Sodium Bearing Waste (SBW) components, etc.) will occur.

C.3.1 EM Facility Infrastructure – RWMC

The Contractor shall operate and maintain the EM-owned buildings and structures at RWMC listed in Exhibit C-3 *List of ICP Core EM Buildings and Structures*. This includes providing operators, maintenance crafts, engineers, support personnel (QA, Safety, etc.), and management. The Contractor shall maintain needed facilities, equipment, roads, and railroads within RWMC throughout the performance period to function at the same level and in the same condition as at the contract effective date. The Contractor shall serve as Building Code Official for EM buildings as described in DOE Order 420.1C, Facility Safety, and associated standards.

The Contractor shall operate and maintain the utility systems for RWMC listed in Exhibit C-4, *ICP Core Utility Systems for INTEC and RWMC*. Utility services must provide adequate building protection including, but not limited to, fire protection (the INL contractor provides the site-wide Fire Department, but the Contractor shall maintain fire protection within RWMC areas), alarm systems, nuclear safety, and Life Safety Code requirements, specified in National Fire Protection Association 101.

The Contractor shall be responsible for general facility maintenance and custodial services at RWMC including, but not limited to: sanitary systems, trash removal, recycling, grass mowing, weed control, housekeeping, floor maintenance, pest control, and snow removal. The INL contractor provides electrical power to the RWMC substations as described in Exhibit C-4, *ICP Core Utility Systems for INTEC and RWMC*. The Contractor shall maintain the power distribution systems downstream from these substations, and reimburse the INL contractor for power consumption.

C.3.2 INTEC Infrastructure

C.3.2.01 EM Facility Infrastructure - INTEC

The Contractor shall operate and maintain the EM-owned buildings and structures at INTEC listed in Exhibit C-3 *List of ICP Core EM Buildings and Structures*. This includes providing operators, maintenance crafts, engineers, support personnel (QA, Safety, etc.), and management. The Contractor shall maintain needed facilities, equipment, roads, and railroads within INTEC throughout the performance period to function at the same level and in the same condition as at the contract effective date. However, the Contractor shall refer to Section C.7.0 for required surveillance, maintenance, and stabilization of SNF facilities. The Contractor shall serve as Building Code Official for EM buildings as described in DOE Order 420.1C, Facility Safety, and associated standards.

The Contractor shall operate and maintain the utility systems for INTEC listed in Exhibit C-4, *ICP Core Utility Systems for INTEC and RWMC*. Utility services must provide adequate building protection including, but not limited to, fire protection (the INL contractor provides the site-wide Fire Department, but the Contractor shall maintain fire protection within INTEC areas), alarm systems, nuclear safety, and Life Safety Code requirements, specified in National Fire Protection Association 101.

The Contractor shall operate and maintain the INTEC Calcine Solids Storage Facility bin sets.

The Contractor shall be responsible for general facility maintenance and custodial services at INTEC including, but not limited to: sanitary systems, trash removal, recycling, grass mowing, weed control, housekeeping, floor maintenance, pest control, and snow removal. The INL contractor provides electrical power to the INTEC substations as described in Exhibit C-4, *ICP Core Utility Systems for INTEC and RWMC*. The Contractor shall maintain the power distribution systems downstream from these substations, and reimburse the INL contractor for power consumption.

The Contractor shall provide material and storage control for TMI-2 and Fort St. Vrain (FSV) spare parts that are currently located in Idaho.

C.3.2.02 Upgrade of the Emergency Communication System (ECS)

The Contractor shall upgrade the Emergency Communication System (ECS) Random Access Digital Audio (RADA) Announcement System. The ECS RADA shall be completed no later than two years from the contract effective date (See Exhibit C-5).

C.3.2.03 Upgrade of Utility Control System

The Contractor shall upgrade the Utility Control System (See Exhibit C-5).

C.3.2.04 Upgrade of Electrical Distribution System

The Contractor shall upgrade the Electrical Distribution System (See Exhibit C-5).

C.3.3 EM Facility Infrastructure – RSWF

The Contractor shall operate and maintain the MFC-771 Radioactive Scrap and Waste Facility (RSWF) at the Materials and Fuels Complex (MFC) to conduct transfers as needed to support the PWS. This includes the RSWF, the RSWF Staging Area, and the TR-64 Personnel Trailer. The Contractor shall maintain and operate the facilities, equipment, storage locations (liners), radiation monitoring tubes, corrosion surveillance liners, cathodic protection system, and roads inside the fence. At the end of the contract period of performance the facilities shall function at the same level and be in the same or better condition as at the contract effective date.

An Interface Agreement shall be required between the Contractor and the INL contractor covering the receipt and disposition of INL generated materials that are required to be placed in RSWF for storage.

C.4.0 CERCLA REMEDIATION

The Contractor shall ensure compliance with the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) and the CERCLA-based Federal Facility Agreement and Consent Order (FFA/CO) for the Idaho National Engineering laboratory (1991), the Agreement to Implement (2008), and with associated CERCLA Records of Decision and their implementing plans for Waste Area Groups (WAG) 1, 2, 3, 4, 5, 6, 7, and 10. Many applicable documents (but not all) are listed in this PWS. These documents are available at http://ar.inl.gov. The Contractor shall develop, submit, and finalize reports required by the above documents in accordance with Exhibit C-6 *Environmental Regulatory Structure and Interface Protocol for the ICP Core Contractor*. Key CERCLA deliverables, including FFA/CO Primary documents, are listed in Section J, Attachment J-2 List of Contract Deliverables/Submittals.

This scope also includes, but is not limited to: hazardous substance release site evaluation and remediation, institutional controls, monitoring, operation and maintenance of remedial actions, and CERCLA Five-Year reviews. The Contractor shall implement Quality Assurance Project Plan (QAPjP) (DOE/ID-10587) as appropriate for data collection activities under the FFA/CO.

C.4.1 INTEC Tank Farm Cap

The Contractor shall assume control of the Interim Tank Farm Low Permeability Cover 90% Design (EDF-10116 dated 3/6/2012) and update it as necessary to reflect current field conditions.

During construction of the interim Cover by the separate DOE Construction/D&D Prime contractor, the Contractor shall maintain the design by keeping it current and incorporating field changes as necessary.

During construction, the Contractor shall support the DOE Construction/D&D Prime contractor. The level of support and specific services provided shall be negotiated with, and paid for by the DOE Construction/D&D Prime contractor per an Interface Agreement.

Following construction, the Contractor shall maintain the interim cap through the remainder of the contract period of performance.

C.4.2 RWMC SDA Cap

The Contractor shall design the final monolithic soil evapotranspiration cap over the Subsurface Disposal Area located within Waste Area Group (WAG) 7 at RWMC in accordance with the Operable Unit (OU) 7-13/14 Phase 3 Remedial Design Work Plan (DOE/ID-11482). The Contractor shall submit the Phase 3 90% pre-final design document for the cap by April 30, 2020 for DOE submittal to the regulatory agencies for review. The Contractor shall also be responsible for revising and finalizing the design document per agency comments in accordance with the FFA/CO.

C.4.3 CERCLA

C.4.3.01 Idaho CERCLA Disposal Facility (ICDF)

The Contractor shall operate and maintain the Idaho CERCLA Disposal Facility (ICDF) through September 30, 2016. The Contractor shall dispose of CERCLA soil and debris in the landfill, and dispose of CERCLA waste liquids in the evaporation ponds, in accordance with the Operable Unit 3-13 Records of Decision (DOE/ID-10660) and the following documents:

- ICDF Complex Remedial Action Work Plan (DOE/ID-10984)
- ICDF Complex Operations and Maintenance (O&M) Plan (DOE/ID-11000)
- ICDF Groundwater Monitoring Plan (DOE/ID-10955)
- ICDF Operational and Monitoring Sampling and Analysis Plan (DOE/ID-11005)
- ICDF Waste Acceptance Criteria (DOE/ID-10881)
- ICDF Complex Waste Profile and Verification Sample Guidance (DOE/NE-ID-11175)
- Health and Safety Plan for ICDF INEEL/EXT-01-01318
- DOE Order 435.1, *Disposal Authorization Statement* through September 30, 2016, including submittal ICDF DOE Order 435.1 annual report.
- ICDF Waste Placement Plan (EDF-ER-286)

The Contractor shall establish an Interface Agreement with a separate DOE Construction/D&D prime contractor to transition the Operation & Maintenance (O&M) of the ICDF (which includes all equipment and the compliance with the Waste Acceptance Criteria (WAC) and grouting as necessary), and shall provide ongoing interface support as necessary to implement work in accordance with the required Interface Agreement. After ICDF is transferred, which is anticipated to be October 1, 2016, the Contractor shall dispose of CERCLA soil, debris, and liquid at the ICDF, including transportation to and placement of its CERCLA waste in ICDF, in accordance with the Interface Agreement and the WAC.

C.4.3.02 WAG 1 Test Area North (TAN)

The Contractor shall implement the Technical Support Facility Injection Well (TSF-05) Record of Decision (ROD) for WAG1, Operable Unit (OU) 1-07B and the associated ROD Amendment. Accordingly, the Contractor shall implement the In-Situ Bioremediation (ISB) Rebound Test Plan (DOE/ID-11444).

The Contractor shall implement the Groundwater Monitoring Plan for TAN OU 1-07B (DOE/ID-11412).

The Contractor shall implement the New Pump and Treat Facility O&M Plan (DOE/ID-10684), the Air Stripper Treatment Unit O&M Plan (DOE/ID-11414), and the ISB O&M Plan (DOE/ID-11012).

The Contractor shall comply with Waste Management Plan for TAN Final Groundwater Remediation OU 1-07B (INEEL/EXT-98-00267).

The Contractor shall maintain the TAN Demolition Landfill in accordance with the Post Closure Care requirements pertaining to the period after the first six months following the Closure Certification per the approved Closure Plan (DOE/ID-11347).

C.4.3.03 WAG 3 INTEC CERCLA Remediation

The Contractor shall implement the Record of Decisions (RODs) for WAG 3, OU 3-13 and 3-14, to ensure Remedial Action Objectives (RAO) are met.

The Contractor shall implement the 3-14 Tank Farm Soil and INTEC Groundwater Remedial Design/Remedial Action (RD/RA) Work Plan (DOE/ID-11333) and take action to reduce anthropogenic water losses and recharge to the INTEC northern perched water zone per the Work Plan, with the exception that a separate DOE construction/D&D contractor will be responsible for construction of the Phase II low-permeability barrier over the Tank Farm as well as preparation, submittal, and finalization of the Part A and B prefinal inspection reports and the interim remedial actions reports (Revisions 1 and 2) in accordance with the work plan.
The Contractor shall implement the OU 3-14 Tank Farm Soil and INTEC Groundwater Long-Term Monitoring Plan (DOE/ID-11334).

The Contractor shall implement the OU 3-14 Tank Farm Soil and INTEC Groundwater Operation and Maintenance Plan (DOE/ID-11337).

The Contractor shall comply with the OU 3-14 Tank Farm Soil and INTEC Groundwater Waste Management Plan (DOE/ID-11335).

C.4.3.04 WAG 7 RWMC CERCLA Remediation

The Contractor shall perform vadose zone sampling and reporting; operate and maintain the organic contamination in the vadose zone vapor extraction and treatment system; provide products and services to satisfy requirements of the Federal Facility Agreement and Consent Order (FFA/CO) at the Subsurface Disposal Area (SDA).

The Contractor shall implement the Field Sampling Plan for OU 7-13/14 Aquifer Monitoring (DOE/ID-11492) and perform groundwater monitoring and O&M of the monitoring wells.

The Contractor shall implement the Vadose Zone Field Sampling Plan for OU 7-13/14 (DOE/ID-11503).

The Contractor shall implement the Operable Unit 7-13/14 Operations and Maintenance Plan (DOE/ID-11393); operate and maintain the vapor vacuum extraction system (OCVZ); complete Pad A inspections and reports, etc. The Contractor shall revise the plan in accordance with the FFA/CO to allow the necessary studies to complete the design for the final SDA cap.

The Contractor shall implement the Health and Safety Plan for OU 7-13/14 Field Activities (ICP/EXT-04-00209) for applicable work at RWMC.

The Contractor shall note that the WAG 7 Buried Waste Exhumation scope is addressed in Section C.5.2.01 CH-TRU Waste Exhumation.

C.4.3.05 WAG 10 Balance of Site Remediation

The Contractor shall prepare and submit to DOE the monthly report required by the FFA/CO Section 17.1 by the 15th day of each month.

The Contractor shall implement the Comprehensive ROD for WAG 10, OU 10-08, for Long-Term Management and Control of ICP sites to ensure remedial action objectives are met.

The Contractor shall maintain all CERCLA records and operate and maintain the environmental databases for all WAGs. This includes, but is not limited to, the Institutional Control (IC) database; the Geographical Information System; the CERCLA Action Tracking System; the Environmental Data Warehouse (EDW); and the Administrative Record and Information Repository.

The Contractor shall implement the Site-Wide Institutional Controls, and Operations and Maintenance (IC & O&M) Plan (DOE/ID-11042).

The Contractor shall prepare a draft 2020 CERCLA 5-year review document for submittal to regulatory agencies by August 15, 2020. The Contractor shall also be responsible for revising and finalizing the 5-year review document per agency comment.

The Contractor shall implement the OU 10-08 Post-Record of Decision Groundwater Monitoring and Field Sampling Plan for OU 10-08 (DOE/ID-11420). The Contractor shall maintain the current CERCLA monitoring well network, including well logging, routine maintenance of existing monitor wells, and the annual reporting of such activities.

The Contractor shall manage and maintain the New Site Process by identifying, tracking, remediating, and documenting the remediation of future new sites in accordance with OU 10-08 ROD and Remedial Design Remedial Action Work Plan (DOE/ID-11418). See Section 5. of DOE/ID-11418. The Contractor shall perform remedial actions at new CERCLA sites identified through the New Site Identification (NSI) process.

The Contractor shall prepare a plug-in remedy memorandum and Explanation of Significant Differences for a removal and disposal plug-in remedy to remove two feet of contaminated gravel from the northern drain (32-TRA), properly plug and abandon both shallow injection wells (32-TRA and 33-TRA at the former location of TRA-655), and maintain institutional controls until the risks have been reduced to acceptable levels. See CERCLA document NSI-25188 for new site TRA-75.

The Contractor shall complete New Site Identification Forms (NSID), Part As, Part Bs, etc. as necessary.

The Contractor shall implement Field Sampling Plans (FSP) and remedial actions in the field.

The Contractor shall implement FSPs for the following new sites:

- TRA-79 (includes TRA-15 and TRA-78) (DOE/ID-11493 Rev. 0). See CERCLA document NSI-26003.

- TRA-80 (includes ATRX courtyard area, TRA-Y, and TRA-19). See CERCLA document NSI-26011.

- CPP-138 (Hot soil at CPP-633). See CERCLA document NSI-26005.

FSP documents for TRA-80, and CPP-138 will be posted to ar.inl.gov when complete.

After the FSPs are implemented for these three sites and characterization data are obtained, the Contractor shall complete Part B of the NSID process for each of the three sites and obtain regulatory agency approval.

The Contractor shall implement the Groundwater Monitoring Plan for ATRX OU 2-13 (DOE/ID-10626).

The Contractor shall implement the Central Facilities Area (CFA) Landfills Long-Term Monitoring and Field Sampling Plan (DOE/ID-11374).

C.4.3.06 Additional Groundwater Monitoring Wells - CFA Landfill (PRICED OPTION)

The Contractor shall abandon three existing monitoring wells and install three new monitoring wells for the CFA Landfill monitoring.

C.4.3.07 Additional Groundwater Monitoring Wells - TAN Groundwater Remediation (PRICED OPTION)

The Contractor shall install three new monitoring wells for the TAN Groundwater Remediation.

C.5.0 WASTE MANAGEMENT

The Contractor shall manage all: hazardous, M/LLW (including primary M/LLW from INTEC and AMWTP, which is stored Legacy CH-TRU reclassified as M/LLW), CH-TRU and RH-TRU waste, and exhumed CH-TRU waste generated by the Idaho Cleanup Project (ICP). Waste types anticipated to be encountered under this PWS include debris, solids, and soil. The Contractor shall establish and maintain a DOE Order 435.1 compliant M/LLW and TRU waste program. This includes but is not limited to: treating waste; maintaining characterization and treatment equipment and facilities; supporting inspection, certification, and compliance audits (including multiple disciplines within the Department of Energy Consolidated Audit Program (DOECAP) process); transporting and disposing; and interfacing with regulatory agencies including EPA, the state of Idaho, the state of Nevada, and the state of New Mexico.

The Contractor shall be subject to the Department of Transportation (DOT) Hazardous Material Regulations (HMR) and may wish to prepare and/or conduct an offsite shipment that is not in accordance with the HMR. If so, then the contractor shall apply for a DOT Special Permit. Applications shall be submitted to the responsible Head of Operations Office or the Field Office/Site Office Manager for processing through the EM Headquarters Certifying Official (HCO) to DOT. Applications shall follow the directions in 49 CFR 107.105.

All TRU waste generated under this Contract, listed in the ISA, identified in the PWS waste inventory exhibits, or encountered during the course of accomplishing this contract work shall be processed and shipped out of the state of Idaho.

All TRU waste with a generation date of 1995 or earlier shall be managed as Idaho Settlement Agreement TRU waste and is defined as “Legacy TRU waste.” Waste retrieved from the Transuranic Storage Area – Retrieval Enclosure (TSA-RE) includes waste that may fall out as M/LLW. Legacy TRU waste shall be processed and shipped out of the State of Idaho prior to December 31, 2018. The Contractor shall assume an initial total volume of 13,000 cubic meters of Legacy TRU waste that shall be treated, characterized, and certified for shipment at the

contract effective date. All Legacy TRU waste and associated volumes that are treated and disposed shall be accounted for such that DOE can provide objective evidence of compliance with provisions of the 1995 Idaho Settlement Agreement and the INL Site Treatment Plan.

All targeted waste exhumed and packaged from the SDA under OU 7-13/14 activities, regardless of assay results, shall be processed and shipped out of the State of Idaho in compliance with the requirements defined in the Agreement to Implement. For WIPP disposal purposes, related to the exhumation of buried waste, the Contractor shall manage it in accordance with the applicable requirements of the Waste Analysis Plan of the WIPP Hazardous Waste Facility Permit, *NM 4890139088-TSDF WIPP document repository* available at http://www.wipp.energy.gov/Documents_All_Number.htm. See Exhibit C-7, *ISA Inventory of CH-TRU Waste [Item Description Code (IDC) Definitions]*, and Exhibit C-13 *Standard Waste Container Volume Assumptions*, for definitions and container volume assumptions for the waste within Exhibits C-8 and C-9. Estimated CH-TRU and RH-TRU waste inventory on-site is available in Exhibit C-8, *ISA Inventory of CH-TRU Waste* and Exhibit C-9, *ISA and Non-ISA Inventory of RH-TRU Waste***.**

Work associated with the disposal of TRU waste at the Waste Isolation Pilot Plant (WIPP), includes, but is not limited to: retrieval from various on-site locations; exhumation from the SDA; development of acceptable knowledge documentation (including Tier 1-request development and support); treatment to meet the Transuranic Waste Acceptance Criteria (WAC) for the WIPP DOE/WIPP/02/3122 Rev 7.4 (WIPP WAC) available at the *WIPP document repository*: http://www.wipp.energy.gov/Documents_All_Number.htm; visual examination; waste characterization and certification; assembly of containers into payloads; and loading of approved transportation containers for shipment to and disposal at WIPP. TRU waste must be treated to meet the requirements of the most current version of the WIPP WAC, which includes, but is not limited to: development of data packages to show compliance with the WIPP WAC, defense of data packages, and negotiation with the state of New Mexico and EPA.

Payloads that are certified for disposal at WIPP shall meet the requirements for shipment in TRUPACT-II containers, HalfPACT containers, RH-72B containers, or other NRC-certified packaging as applicable (i.e. TRUPACT-III containers, once certified). The container specifications for approved payload configurations are identified in the most current version of the WIPP WAC. The payload configurations can include a mixture of TRU waste and waste having TRU constituents provided the final disposal configuration is determined to be TRU waste.

The WIPP Shipping Baseline schedule is subject to Carlsbad Field Office (CBFO) approval and utilizes a week starting on Sunday and ending on Saturday. The Contractor shall ensure the WIPP Shipping Baseline schedule accounts for the following Idaho native Indian tribal holidays: [Treaty Days (July 3), Independence Day (July 4), Shoshone – Bannock Indian Festival (second weekend in August, Thursday through Sunday) and Indian Days (last Friday of September)]. The Contractor shall plan for approximately six weeks for the annual WIPP maintenance shutdown, typically during the second quarter of the Government fiscal year. CBFO will establish what constitutes the last shipment prior to a holiday or shutdown and when shipments can resume.

Agreement on specific dates for TRU waste shipments to WIPP shall be reached with the DOE Carlsbad Field Office, approximately one month in advance. Shipments shall be managed through the CBFO approved WIPP Shipping Baseline schedule. The WIPP Shipping Baseline schedule is subject to changes based upon CBFO funding and DOE priorities. The Contractor shall plan for operations at WIPP to resume by 9/30/2016, consistent with the WIPP Recovery Plan at: http://www.wipp.energy.gov/wipprecovery/recovery.html, and shall plan for 25 shipments of CH-TRU per week to WIPP and two (2) shipments of RH-TRU per week to WIPP. Shipment departure times are subject to CBFO approval in order to minimize transit times between the INL site and WIPP and to comply with CBFO agreements with participating states en route (i.e. the number of shipments at a Port of Entry at any one time or shipment arrival times at a Port of Entry).

Transportation inspections are required by the U.S. Department of Transportation (DOT) and the State of Idaho prior to the TRU waste shipments leaving the INL. The Contractor shall be responsible for control of the shipment through: loading and assembly of the cask, placement and securing the cask onto the transport trailer provided by the Government, and inspection of the assembled load, truck, and trailer by the Idaho State Police (ISP). After the ISP has determined that the shipment has passed inspection, the shipment is released, thereby transferring control to the WIPP transportation contractor. Transportation of TRU waste to WIPP is the responsibility of CBFO after the transport receives dispatch approval from the WIPP Central Monitoring Room and leaves the INL security gate.

The three major waste programs discussed under this section include: CH-TRU (C.5.1 and C.5.2), RH-TRU (C.5.3 and C.5.4), and CH M/LLW (C.5.5).

C.5.1 CH TRU Waste Disposition

The Contractor shall complete the processing of all ISA waste at the Transuranic Storage Area (TSA) and also shall complete shipment out of the state of Idaho for disposal by December 31, 2018. The disposal schedule for TRU waste will be finalized once operations at WIPP resume. All non-ISA waste at TSA shall be treated and disposed of within 6 months of the completion of the ISA scope. The estimated ISA waste volume (already retrieved and in storage) is included in Exhibit C-8, *ISA Inventory of CH-TRU Waste.* These activities include, but are not limited to, routine operations and maintenance activities needed to support the CH-TRU facilities and any facility improvements needed to sustain operations. When all CH-TRU waste and M/LLW has been shipped out of the state of Idaho for disposal, facilities shall be maintained in a stand-by condition to the end of the contract unless directed otherwise by the CO.

C.5.1.01 AMWTP Permit

The AMWTP Hazardous Waste Management Act (HWMA)/RCRA Permit was issued with an effective date of 06/04/2008, and currently consists of the Waste Storage Facilities (WSF) (WMF-628 through WMF-635), WMF-610, WMF-676, and the Outside Storage Area. The WSF, WMF-610, and WMF-676 are currently permitted for storage, various miscellaneous treatment, and mechanical processing. WMF-636 Pad 2 and the Outside Storage Area are

currently permitted for container storage and treatment.

The Contractor shall complete a reapplication for the AMWTP HWMA/RCRA Permit as required by the INL RCRA Work Plan, see the following website: https://idahocleanupproject.com/Portals/0/Documents/FINALWORKPLAN_Rev041714.pdf. This reapplication is required to be submitted to the Idaho Department of Environmental Quality (IDEQ) by December 1, 2017, and shall include all areas that are currently permitted.

The Contractor shall prepare a RCRA closure plan for WMF-636 including the TSA-RE Interim Status Units and WMF-636 Pad 2 and submit the plan to DOE for approval. This plan may require coordination with CERCLA to determine if contamination is present below the asphalt. The closure plan shall be developed to show closure activities beginning within 90 days of removing all stored TRU waste from the facilities. WMF-636 (TSA-RE) is a weather-tight metal building over hazardous waste container storage units TSA-RE Pad R, Pad 2, and Pad 1. The TSA-RE building covers the waste stack, berms, and sloped earth. TSA-RE Pad 1 and TSA-RE Pad R are currently permitted for storage, liquid absorption, decanting, neutralization, sizing, and repackaging. The Pad 1 and Pad R portions of this unit will operate under interim status, and the Pad 2 portion of this unit will operate under the AMWTP HWMA/RCRA Permit until closure.

C.5.1.02 CH-TRU Waste from Other DOE Sites

The Contractor shall process up to 100 cubic meters of CH-TRU waste from other DOE sites as directed by the CO in accordance with the INL Site Treatment Plan requirements. Anything beyond 100 cubic meters will be directed by the CO and will be considered out of target work scope under CLIN 00001. The INL Site Treatment Plan requires that this waste be treated within six (6) months of receipt and shipped out of the state of Idaho within six (6) months of treatment, whether dispositioned as CH-TRU or M/LLW. CH-TRU waste from other DOE sites will be shipped in TRUPACT containers or other certified packaging. The Contractor shall separately account for all treated and disposed waste volumes such that DOE can provide objective evidence of compliance with provisions of the 1995 Idaho Settlement Agreement and the INL Site Treatment Plan. The Contractor shall reduce the volume of this material whenever possible, such as through supercompaction, prior to shipment for disposal. The Contractor shall manage this additional work such that no INL Site regulatory milestones will be missed. This work may be performed utilizing existing facilities and equipment as agreed to by the Contractor and the generating site within a DOE-approved MOU.

C.5.1.03 CH-TRU Retrieval

The Contractor shall complete the retrieval of all stored waste from the earthen covered berms and cargo containers located within building number WMF-636, Transuranic Storage Area (TSA)-Retrieval Enclosure (RE) to ensure that all waste can be certified and/or shipped prior to December 31, 2018. All waste retrieved from WMF-636 shall be managed as Idaho Settlement Agreement waste. The retrieved containers may be breached, damaged, degraded, or of questionable structural integrity. The Contractor shall take appropriate measures to manage all containers safely and effectively to minimize the spread of radioactive contamination and hazardous materials, and exposure to workers. The Contractor shall disposition the soil cover

removed from the waste stored in the TSA-RE in a compliant manner established by the Contractor (e.g. CERCLA waste in ICDF). The approximate footprint of the containers that remain to be retrieved from WMF-636 is included in Exhibit C-14, *CH-TRU Waste Inventory to be Retrieved*.

C.5.1.04 CH-TRU Characterization and Certification

In order to ship waste to WIPP, the waste shall be certified and characterized, packaged, and shipped by a program that is certified by CBFO. On the contract effective date, the Contractor shall assume responsibility for the certification authority granted to the Idaho CH-TRU Program by CBFO in order to characterize CH-TRU waste for disposal at WIPP. The Contractor shall maintain the certification authority to perform the characterization, packaging, and shipping of CH TRU waste to WIPP throughout the contract period. To maintain this capability, the Contractor shall accommodate audits performed by the CBFO, the state of New Mexico, and the EPA.

The Contractor shall perform characterization as needed for storage, treatment, certification, transportation, and disposal of CH-TRU waste. Characterization may include, but is not limited to: radiological or radiographical examination, visual examination, non-destructive assay, head-space gas analysis, and/or flammability analysis (prior to final certification), reviewing characterization and treatment data to ensure the waste meets all disposal requirements, or any other methodology acceptable to DOE. The Contractor shall ensure waste packages meet all certification requirements for acceptance at WIPP.

C.5.1.05 CH-TRU Treatment

The Contractor shall treat all legacy CH-TRU waste for disposal and certify that the waste has been treated to applicable requirements, including the waste acceptance criteria of the treatment/disposal facility. Waste that is demonstrated through assay to contain greater than or equal to100 nCi/g of transuranic isotopes shall be treated to meet the requirements of the WIPP WAC and shall be disposed of as CH-TRU. Waste that is demonstrated through assay to contain less than 100 nCi/g of transuranic isotopes shall be classified as M/LLW and shall meet the requirements of the appropriate disposal facility's WAC for disposition.

Existing treatment processes include but are not limited to: repackaging, size reduction, opening and sorting waste in order to address prohibited conditions, and mixing with absorbent to remove free liquid. These processes are currently performed in various facilities at RWMC including the Advanced Mixed Waste Treatment Facility, various treatment tents in the CH-TRU program, Accelerated Retrieval Project (ARP) V for sludge repackaging, and various other facilities at RWMC. All of these processes are available for the Contractor to use as appropriate.

C.5.1.06 CH-TRU Storage and Movement

The Contractor shall store all waste in a safe and compliant manner until the waste is disposed off-site or transferred for shipment to WIPP. Waste may be transferred within the RWMC footprint without characterization or Department of Transportation (DOT) compliant packaging. Waste transfers between RWMC and INTEC or Materials and Fuels Complex (MFC) shall be performed under the Contractor's DOE approved Transportation Safety Document in accordance with DOE 460.1C, Packaging and Transportation Safety.

C.5.1.07 CH-TRU Packaging and Transportation

Contractor assembly and certification of payloads and shipments are under the oversight and authority of the DOE CBFO Central Characterization Project (CCP). The Contractor shall utilize the services of the DOE CBFO CCP contractor to oversee the development of the CH-TRU waste assembly and certification of payloads and shipments in accordance with the DOE CBFO TRU Waste Transportation Plan (DOE/CBFO 98-3103 Rev 3, effective date 10/2012). Costs for the services of DOE CBFO CCP shall be included in the Contractor's target cost, with the exception of the costs for shipment of the waste to WIPP.

For the CH-TRU packaging and transportation activities, the CCP Contractor will be responsible for:

- Assembly of certified waste containers into virtual payloads for shipment to WIPP.
- Completion of flam gas analysis and other transportation related activities that lead to the development of a certified shipment.
- Oversight of the payload assembly and loading for WIPP shipment.
- Shipment of waste to WIPP.

The Contractor shall utilize payload configurations that maximize the WIPP disposal capability, as determined by CBFO. The Contractor shall assemble shipments that contain a mixture of payloads that can be disposed of in an efficient arrangement in WIPP (i.e., a mixture of 7-packs of 55-gallon drums, 3-packs of 100-gallon product drums, ten drum overpacks, and standard waste boxes). The Contractor shall follow DOE policy for efficient use of TRU waste transportation resources which requires shipping sites to ship the maximum number of loaded packages (i.e., three TRUPACT-IIs or two TRUPACT-IIs and one HalfPACT) per shipment with minimal dunnage containers and the maximum amount of waste. All over-packed shipping configurations require specific advance approval from CBFO.

The Contractor shall follow DOE CBFO guidelines specified in the WIPP WAC. Such measures shall include, but are not limited to, supercompaction of waste whenever practical, and utilizing payload configurations and waste packaging that minimizes dunnage and maximizes shipping and disposal efficiency.

The Contractor shall utilize transport containers provided by WIPP. Transport of TRU waste to WIPP is a government furnished service that is provided by CBFO (see Section H.57 *GOVERNMENT FURNISHED SERVICES/ITEMS*). Costs for transportation of TRU waste to WIPP that are associated with: TRUPACT-II, HalfPACT, other approved NRC licensed

containers, trailers, tractors, drivers, and disposal at WIPP are borne by CBFO. All other costs, including consumables, associated with TRU waste shipments to WIPP shall be included in the Contractor's Target Cost.

The Contractor shall ship all CH-TRU waste previously certified, but not shipped, by the incumbent contractor as a result of the 2014 WIPP shutdown. The backlog of CH-TRU waste is anticipated to be 750 shipments (approx. 3,750 cubic meters) which shall be shipped per the shipping schedule established by WIPP. The backlog inventory shall be shipped prior to any other CH-TRU waste. The exhumed SDA waste shall be shipped after the CH-TRU waste backlog has been shipped and after the ISA CH-TRU waste has been shipped.

C.5.2 Buried Waste Exhumation

The Contractor shall continue implementation of the WAG 7 OU 7-13/14 ROD and Agreement to Implement Court Order, dated May 25, 2006, including all required actions and reporting. In performing waste exhumation, the Contractor shall implement the OU 7-13/14 Phase 1 RD/RA Work Plan, Rev. 2 (DOE/ID-11389). Targeted buried waste exhumation shall be completed and the draft Phase I Interim Remedial Action Report shall be submitted to the agencies in accordance with the FFA/CO and the *Environmental Regulatory Structure and Interface Protocol for the ICP Core Contractor* (see Exhibit C-6). The Phase I Interim Remedial Action Report shall be finalized with regulatory agency acceptance in accordance with the FFA/CO.

The Contractor shall complete buried waste exhumation of the approximately 1.7 acres of remaining footprint in ARPs VIII and IX (including system operability testing and operations startup of ARP IX) at the RWMC using the existing facilities and equipment (excavators, telehandlers, front end loaders, Drum Packaging Stations, etc.). This scope shall include the operations, maintenance and improvements of RWMC facilities located on the Subsurface Disposal Area (SDA). These activities shall include but are not limited to: routine operations and maintenance activities needed to support the AMWTP facilities, and any facility improvements needed to sustain operations. All other work associated with processing exhumed waste shall be completed in accordance with Sections C.5.1.04, C.5.1.06, and C.5.1.07.

The Contractor shall continue to operate and maintain facilities WMF-602, 610, 618, 628, 634, 635, and type II storage modules (WMF- 629 – 633) as needed for both stored and/or buried CH-TRU waste through completion of shipping of exhumed waste.

C.5.3 RH-TRU Waste Disposition RH-TRU (LOTS 1 – 9)

The Contractor shall complete the processing and shipment for disposal out of Idaho for all RH-TRU in storage at INTEC which includes all waste remaining in Lots 1 through 9. The estimated inventory is included in Exhibit C-9, *ISA and Non-ISA Inventory of RH-TRU Waste.* All waste in Lots 1 through 9 shall be treated and packaged by September 30, 2016, and shipped out of the state of Idaho for disposal by December 31, 2018. This scope includes the operations, maintenance, and improvements of RH-TRU Program facilities at INTEC. These activities shall include, but are not limited to: routine operations and maintenance activities (including maintenance of the FDP cell portion of CPP-666 for GFY 2016, GFY 2017 and GFY 2021) needed to support the RH-TRU Program facilities, and any facility improvements needed to sustain operations.

The RH-TRU Program consists of the following elements.

C.5.3.01 RH-TRU Retrieval

The Contractor shall retrieve stored RH-TRU waste from INTEC (CPP-1617) and from the RSWF at MFC and stage it at INTEC for future treatment at CPP-666. The Contractor shall use a DOE provided Facility Transfer Cask, or an Interim Storage Container (ISC), when transporting material from the RSWF to INTEC. Retrieval of waste from RSWF may require pulling inner waste containers from below grade liners or excavation of the outer liners depending upon the inner waste container integrity.

C.5.3.02 RH-TRU Characterization and Certification

In order to ship waste to WIPP, the waste shall be certified and characterized, packaged, and shipped by a program that is certified by CBFO. The Contractor shall utilize the services of the DOE CBFO CCP contractor to develop RH-TRU waste certification data packages and assemble the loads. Costs for the services of DOE CBFO CCP shall be included in the Contractor's target cost. The Contractor shall support the development of the waste certification data packages to show compliance with the WIPP WAC, support the defense of the data packages, and support negotiations with the State of New Mexico and the Environmental Protection Agency. The Contractor shall accommodate audits performed by the CBFO, the state of New Mexico, and the EPA.

The Contractor shall perform characterization under the DOE CBFO CCP program as needed for storage, treatment, certification, transportation, and disposal of RH-TRU waste. Characterization may include, but is not limited to, radiological or radiographical examination, visual examination, dose-to-curie, head-space gas analysis, and/or flammability analysis, wattage determinations, reviewing characterization and treatment data to ensure the waste meets all disposal requirements, or any other methodology acceptable to DOE. This scope shall also include maintaining and operating the TRU Waste laboratory and its certification to perform analysis as required to support disposal at WIPP.

C.5.3.03 RH-TRU Treatment

The Contractor shall treat all waste for disposal and certify that the waste has been treated to applicable requirements, including the waste acceptance criteria of the treatment/disposal facility. Waste that is demonstrated through assay or dose-to-curie to contain greater than or equal to100 nCi/g of transuranic isotopes shall be treated to meet the requirements of the WIPP WAC. Waste that is demonstrated through assay or dose- to-curie to contain less than 100 nCi/g of transuranic isotopes shall meet the requirements of the appropriate disposal facility's WAC.

Existing treatment processes include but are not limited to: repackaging, size reduction, removal of WIPP prohibited waste characteristics (e.g. Sodium), and opening and sorting waste in order to address prohibited conditions that prevent disposal of the subject waste. These processes are currently performed in CPP-666 and CPP-659 at INTEC. All of these processes are available for the Contractor to use as appropriate.

No liquids are anticipated to be generated during RH-TRU treatment that would require the INTEC Liquid Waste Management System to remain active for RH-TRU operations.

C.5.3.04 RH-TRU Storage and Movement

The Contractor shall store all waste in a safe and compliant manner until the waste is disposed off-site or transferred for shipment to WIPP. Waste may be transferred within the INTEC footprint without characterization or DOT compliant packaging. Waste transfers between RWMC or MFC and INTEC shall be performed under the Contractor's DOE approved Transportation Safety Document in accordance with DOE 460.1C, Packaging and Transportation Safety.

C.5.3.05 RH-TRU Packaging and Transportation

Contractor assembly and certification of payloads and shipments are under the oversight and authority of the DOE CBFO CCP. The Contractor shall utilize the services of the DOE CBFO CCP contractor to oversee the development of the RH-TRU waste assembly and certification of payloads and shipments in accordance with the DOE CBFO CCP certified Packaging and Transport program. Costs for the services of DOE CBFO CCP shall be included in the Contractor's target cost. Contractor assembly and certification of payloads and shipments shall be performed in accordance with the CCP certified packaging and transportation program. The Contractor shall utilize payload configurations that maximize the WIPP disposal capability, as determined by CBFO. The Contractor shall assemble shipments that contain a mixture of payloads that can be disposed of in an efficient arrangement in WIPP. The Contractor shall follow DOE policy for efficient use of TRU waste transportation resources which requires shipping sites to ship the maximum number of loaded packages (i.e., fully-loaded RH-72Bs) per shipment with minimal dunnage containers and the maximum amount of waste. All over-packed shipping configurations require specific advance approval from CBFO.

The Contractor shall follow DOE Carlsbad Field Office guidance specified in the WIPP WAC. Such measures shall include, but are not limited to utilizing payload configurations and waste packaging that minimizes dunnage and maximizes shipping and disposal efficiency

The Contractor shall utilize transport containers provided by WIPP. Transport of TRU waste to WIPP is a Government Furnished Service that is provided by CBFO. Costs for transportation of TRU waste to WIPP that are associated with: RH-72B casks, other approved NRC licensed containers, trailers, tractors, drivers, and disposal at WIPP are borne by CBFO. All other costs, including consumables (e.g., removable lid canisters), associated with TRU waste shipments to WIPP shall be included in the Contractor's Target Cost.

The Contractor shall ship all RH-TRU waste (Lots 1-9) previously certified, but not shipped, by the incumbent contractor as a result of the 2014 WIPP shutdown. The backlog of RH-TRU waste is anticipated to be 50 shipments (approx. 15 cubic meters) which shall be shipped per the shipping schedule established by WIPP. The backlog inventory shall be shipped prior to any other RH-TRU waste. Once the backlog inventory has been shipped, the Contractor shall resume shipments of RH-TRU waste in accordance with the shipping schedule established by WIPP to meet the ISA 12/31/2018 date.

C.5.3.06 RH Waste LOT 11 and LOT 12

The Contractor shall develop and submit a cost, technical, and schedule estimate to DOE by November 30, 2016 to retrieve, process, treat, characterize, and dispose of the waste identified as all of Lot 11 (Legacy RH-M/LLW). Lot 11 can only be treated in CPP-666 due to container size and Rad fields greater than 50 R/hr at 30 cm. Lot 11 could generate TRU waste. See Exhibit C-11, *Lot 11 – Legacy RH-M/LLW*. This waste is located in below ground storage at the RSWF at MFC.

The Contractor shall develop and submit a cost, technical, and schedule estimate to DOE by November 30, 2016 to retrieve, process, treat, characterize, and dispose of the Lot 12 waste with Rad fields of greater than 50 R/hr at 30 cm and that cannot be processed in CPP-659 due to size restrictions per Exhibit C-12, *Lot 12 - Newly Generated RH-TRU and MTRU Waste*. This waste is located in below ground storage at the RSWF at MFC.

The cost, technical, and schedule estimates to be provided should not be constrained by the ICP Core contract funding profile nor the ICP Core contract period of performance.

C.5.3.07 RH Waste LOT 11 Option Work (PRICED OPTION)

The Contractor shall operate the RH Waste program in accordance with sections C.5.3.01 RH-TRU Retrieval, C.5.3.02 RH-TRU Characterization and Certification, C.5.3.03 RH-TRU Treatment, C.5.3.04 RH-TRU Storage and Movement, and C.5.3.05 RH-TRU Packaging and Transportation for a portion of Lot 11 (Legacy RH-M/LLW), under the CH-ANL-180RH waste stream ID stored in 24-in RSWF Liners. See Exhibit C-11, *Lot 11 – Legacy RH-M/LLW*. This work shall be completed in GFY2017. The Contractor shall treat as much of the CH-ANL-180RH waste stream that is stored in 24-in RSWF Liners in a 12 month period as possible.

This scope involves the treatment and repackaging of waste that contains sodium, NaK, and/or RCRA metals. The reactive nature of this waste requires segregation and management to

prevent its unintended contact with water or other materials that may cause a reaction. Activities such as hot cell cleanouts may be required prior to introduction of other waste streams into treatment areas that have processed active waste. This waste shall be retrieved from below ground storage at the RSWF at MFC, or above ground as made available by the INL contractor, and transferred to INTEC by the Contractor for treatment. The storage configuration at RSWF is vertical pipes placed below grade and retrieval may require excavation of the pipes.

C.5.3.08 RH Waste LOT 12 Option Work (PRICED OPTION)

The Contractor shall operate the RH Waste program in accordance with sections C.5.3.01 RH-TRU Retrieval, C.5.3.02 RH-TRU Characterization and Certification, C.5.3.03 RH-TRU Treatment, C.5.3.04 RH-TRU Storage and Movement, and C.5.3.05 RH-TRU Packaging and Transportation for Lot 12 (Newly Generated RH M/LLW and MTRU Waste) per Exhibit C-12, *Lot 12 – Newly Generated RH-TRU and MTRU Waste.*

This option shall only include work that is excluded in Section C 5.3.06, treating only waste with Rad fields of less than 50 R/hr at 30 cm. This waste is located in below ground storage at the RSWF at MFC. CPP-659 is available to characterize, treat, certify, package and transport this waste.

C.5.4 Naval Nuclear Propulsion Program (NNPP) Pieces, Parts, and Fines (PPF) (RH-TRU LOT 10)

The Contractor shall treat and dispose of the Naval Nuclear Propulsion Program (NNPP) 102 cans (Lot 10). See Exhibit C-10, *NNPP Pieces, Parts, and Fines (PPF) Inventory*. In addition to the RH-TRU Program activities defined in Sections C.5.4.01 – C.5.4.05, the Contractor shall also transfer the NNPP-PPF from the CPP-666 fuel storage basins to the CPP-666 Fluorinel Dissolution Process (FDP) hot cell for treatment as RH-TRU waste, and then characterize, package and ship off site for disposal. All costs associated with this work shall be tracked separately to allow EM to recover costs from NNPP. All M/LLW and other process generated waste resulting from the treatment and handling of the NNPP-PPF shall be properly treated, characterized, and shipped off site for disposal. The Contractor shall inform DOE of material that does not meet the WIPP WAC.

This work (Lot 10) shall begin no earlier than GFY2018, and the waste shall be processed and shipped in available facilities (e.g. processing the waste in CPP-666 FDP hot cell; shipping and characterization in CPP-659). Operations, including upgrades, during GFY 2018 thru 2020 shall be performed in the available facilities per availability of NNPP funds.

The scope of work to be performed includes: preparing or revising facility authorization basis documents supporting project activities; completing facility modifications and equipment upgrades at building CPP-666 Fuel Storage Area (FSA), CPP-666 FDP cell, and building CPP-659 where characterization, certification, and transportation activities occur; completing waste characterization activities, including submitting the Lot 10 Tier 1 review and approval through EPA and CBFO; certifying the waste; and preparing the repackaged waste for shipment and disposal at WIPP.

Security clearances shall be required for all staff that will view the contents of the NNPP containers or have access to the classified information associated with their contents. A secure conference room with electronic communications equipment, located in CPP-666, shall be maintained for the use of NNPP staff. This room can be shared with staff associated with the SNF Transfer Program.

C.5.4.01 Naval Nuclear Propulsion Program (NNPP) RH-TRU Retrieval

The Contractor shall retrieve Naval Nuclear Propulsion Program (NNPP) Pieces, Parts, and Fines (PPF) (RH-TRU LOT 10) stored waste from CPP-666 at INTEC. Facility hot cell clean out and decontamination (from prior Sodium waste processing), facility modification, facility and transfer cart upgrades, and preparations shall be completed prior to initiating Lot 10 waste processing. Three cart inserts are required to support can transfers to the FDP cell. The transfer cart is used to transfer individual cans from the pool storage area through the canal into the FDP cell for repackaging.

C.5.4.02 Naval Nuclear Propulsion Program (NNPP) RH-TRU Characterization and Certification

The Contractor shall characterize Naval Nuclear Propulsion Program (NNPP) Pieces, Parts, and Fines (PPF) (RH-TRU LOT 10) in accordance with C.5.3.02. Waste characterization and certification will be performed under the certification authority of the CCP for disposal at WIPP. Acceptable Knowledge (AK) summary report development will be completed by incumbent contractor and shall be used by the Contractor to treat the Lot 10 work in a timely manner to meet the certification process to ship all waste out of the state of Idaho.

C.5.4.03 Naval Nuclear Propulsion Program (NNPP) RH-TRU Treatment

The Contractor shall treat Naval Nuclear Propulsion Program (NNPP) Pieces, Parts, and Fines (PPF) (RH-TRU LOT 10) in accordance with C.5.3.03. Accountability of nuclear material shall remain in effect until treatment and packaging are completed. NNPP PPF shall be treated using existing facilities and equipment.

C.5.4.04 Naval Nuclear Propulsion Program (NNPP) RH-TRU Storage and Movement

The Contractor shall perform storage and movement of Naval Nuclear Propulsion Program (NNPP) Pieces, Parts, and Fines (PPF) (RH-TRU LOT 10) in a safe and compliant manner until the waste is disposed off-site or transferred for shipment to WIPP. Waste may be transferred within the INTEC footprint without characterization or DOT compliant packaging.

C.5.4.05 Naval Nuclear Propulsion Program (NNPP) RH-TRU Packaging and Transportation

The Contractor shall perform packaging and transportation of Naval Nuclear Propulsion Program (NNPP) Pieces, Parts, and Fines (PPF) (RH-TRU LOT 10) in accordance with C.5.3.05 and shall

be shipped out of the state of Idaho for disposal by September 30, 2020. Any waste that cannot be disposed at WIPP shall be packaged in a manner that allows NNPP to store the remains in the FSA and returned to NNPP.

C.5.5 CH MLL LLW Disposition

C.5.5.01 Waste Generator Services

The Contractor shall manage a waste generator services program that encompasses: hazardous and M/LLW (including primary M/LLW from AMWTP, which is stored legacy CH-TRU reclassified as M/LLW, and M/LLW at INTEC, see Exhibit C-26, *U-233 Waste Located In Storage at INTEC*) waste. This management starts with pre-generation planning through shipment to off-site or on-site disposal. The Contractor shall ensure that all wastes are properly characterized and maintained in safe, compliant storage until properly disposed of or shipped off-site. The Contractor shall establish management controls to allow timely and efficient verification by DOE of waste volumes retrieved, treated, certified, packaged, loaded, and shipped off-site. The Contractor shall safely manage and dispose of waste, generated by or discovered during on-site EM cleanup activities (which includes any waste generated at TMI-2 by the NRC contractor), at an appropriate disposal facility. The Contractor shall establish or maintain the generator certifications with off-site disposal facilities (e.g. Energy Solutions, Waste Control Specialists, etc.) necessary to implement the PWS. Should another contractor require ICP Core Waste Generator Services, then the Interface Agreement between the two contractors shall define how waste treatment and disposal services will be provided and reimbursed.

There is currently no on-site disposal facility for non-CERCLA M/LLW. Packaging, transporting, and disposing of non-TRU waste for treatment and/or disposal facilities shall be the responsibility of the Contractor. The Contractor shall package waste to meet applicable regulatory and treatment/disposal requirements and shall comply with the applicable waste acceptance criteria for treatment and disposal facilities. The Contractor shall be responsible for providing shipping containers for non-TRU waste and ensuring all applicable shipments meet DOT requirements. The Contractor shall provide transportation coordination related to the scheduling, inspection, notification, tracking, and reporting of non-TRU waste shipments. The Contractor shall assume responsibility for the shipping certification granted by the DOE Nevada National Security Site (NNSS) in order to dispose of non-TRU waste at NNSS. This certification shall be maintained throughout the contract.

The Contractor shall treat, as necessary, and dispose of process-generated waste and other wastes in accordance with time-frames specified in the Site Treatment Plan or any other relevant regulations or regulatory requirements. Process-generated waste is newly generated as a result of waste processing, maintenance operations, or equipment change out. Examples of process-generated wastes include, but are not limited to, shredder boxes, empty cargo containers, cleaning solvents used during maintenance, rags, contaminated clothing, and failed equipment parts. All process generated waste created during the execution of this Contract, with the exception of waste generated in the last 90 days, shall be dispositioned prior to the end of the Contract.

The Contractor shall operate the RWMC RH-LLW vaults and dispose of on-site generated NNPP remote-handled (RH) low level radioactive waste (LLW) using the concrete vaults at the Subsurface Disposal Area (SDA). The Contractor shall be responsible for the safe management and disposal of RH-LLW and the work shall be performed prior to September 30, 2020 consistent with the Phase 1 Remedial Design\Remedial Action Work Plan for Operable Unit 7-13/14 (DOE-ID-11389 Rev2).

The Contractor's Waste Generator Services shall include the following:

1. Management and operations of the Integrated Waste Tracking System (IWTS) and the Waste Tracking System (WTS) at AMWTP.
2. Packaging and transportation services including coordination of shipments that do not meet Department of Transportation requirements (non-routine shipments) and shipment of non-WIPP containerized waste from the Accelerated Retrieval Project (ARP) exhumations.

C.5.5.02 Special Requirements Wastes

During the course of normal operations, the Contractor may encounter waste that has special handling requirements. These wastes include, but are not limited to: non-defense TRU waste, mercury contaminate granulated activated carbon (GAC), high fissile gram equivalent (FGE) TRU waste, oversized and overweight containers and items, greater than class C (GTCC)-like waste, and TRU waste from other DOE sites. The Contractor shall manage this waste in accordance with all applicable laws and regulations.

There are currently no operating facilities that can accept non-defense TRU waste and GTCC-like waste for treatment and/or disposal. WIPP can only accept defense-generated TRU waste and no other commercial or Government facility has disposal and/or treatment capability. The Contractor shall manage this waste in accordance with all applicable laws and regulations until such a time as an operating facility becomes available.

C.5.5.03 Legacy Excess Radioactive/Hazardous Materials (PRICED OPTION)

The Contractor shall process and dispose of all Legacy Excess Radioactive/Hazardous Materials (excluding depleted uranium ingots) and the entire Sodium Component Maintenance Shop (SCMS) Backlog. See Exhibit C-15 *Inventory of Legacy Excess Radioactive/Hazardous Materials* and Exhibit C-16 *Inventory of SCMS Backlog*. Processing and disposing of this waste includes Retrieval, Characterization and Certification, Treatment, Storage and Movement, and Packaging and Transportation.

C.5.5.04 Legacy Excess Radioactive/Hazardous Materials

For the depleted uranium ingots generated by Experimental Breeder Reactor II spent nuclear blanket fuel processing, see Exhibit C-15, *Inventory of Legacy Excess Radioactive/Hazardous Materials*. The Contractor shall perform an evaluation of the waste stream and provide a recommended disposal path, along with an estimated cost and schedule, to DOE by September 30, 2018.

C.5.6 RCRA Closure of AMWTP Facilities (PRICED OPTION)

The Contractor shall perform RCRA closure for AMWTP facilities excluding WMF-602, 610, 618, 628, 634, 635, and type II storage modules (WMF- 629 – 633) if still needed. This includes finalizing the closure plan per the RCRA permit, and then executing the RCRA closure per that plan.

C.5.7 Additional Temporary CH-TRU Storage (PRICED OPTION)

The Contractor shall construct one 15,000 drum equivalent storage facility to address storage of waste while WIPP remains closed. The facility shall be constructed in the Pit 9 laydown area North of the Subsurface Disposal Area (SDA), and shall be constructed in accordance with Exhibit C-17, *CH-TRU Storage Facility Technical and Functional Requirements*.

C.5.8 ARP IX Construction Support at RWMC

The Contractor shall assume and maintain the ARP IX design through the period of construction and shall also support construction activities of ARP IX to be performed by a separate DOE Construction/D&D prime contractor. The Contractor shall accept the ARP IX facility from the separate DOE Construction/D&D prime contractor upon construction completion (anticipated to be October 1, 2017).

C.6.0 LIQUID WASTE FACILITY CLOSURE

C.6.1 Integrated Waste Treatment Unit (IWTU) Operations and Turnover (PRICED OPTION)

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The Contractor shall make IWTU fully operational. The Contractor shall operate and maintain the IWTU from the date at which IWTU is fully operational until loss of suction on all four tanks named below, to complete treatment of an estimated 900,000 gallons of Sodium-Bearing Waste (excluding rinsate) from INTEC Tanks WM-187, WM-188, WM-189, and WM-190 and store the waste product in the IWTU storage area.

Fully operational is defined as processing radioactive liquid waste from the INTEC Tank Farm through the IWTU to produce a granular product to be stored in canisters and vaults at the IWTU. Fully operational does not require satisfying the design name plate throughput valve. Loss of suction is defined as when suction is lost on the existing steam jets currently installed in the tanks. The Contractor shall assume at least two maintenance outages that will each last a period of two months. Transfer of the third party fully-paid up license for steam reforming from the incumbent contractor to the Contractor will occur prior to the Contractor taking over IWTU.

~~The Contractor shall operate and maintain the IWTU from the contract effective date until loss of suction on all four tanks named below, to complete treatment of an estimated 900,000 gallons of~~

~~Sodium-Bearing Waste (excluding rinsate) from INTEC Tanks WM-187, WM-188, WM-189, and WM-190 and store the waste product in the IWTU storage area. Loss of suction is defined as when suction is lost on the existing steam jets currently installed in the tanks.~~

~~The Contractor shall assume that the facility is fully operational and is processing 2.5 gallons per minute by the NTP. Fully operational is defined as processing radioactive liquid waste from the INTEC Tank Farm. The Contractor shall assume at least two maintenance outages that will each last a period of two months. Transfer of the third party license for steam reforming from the incumbent contractor to the Contractor will have to take place in order to use the existing steam reforming treatment process.~~

~~The IWTU priced option~~ C.6.1 is not part of the contract's Section B.6 *Contract Performance Ceiling.* The IWTU priced option is fully cost reimbursement separate CLIN (CLIN 00006) with a fixed fee component and none of the fee, once earned, can be clawed-back based on performance on the ~~ITWU~~ IWTU scope or any other areas of the contract. ~~The scope specified in this PWS for the IWTU priced option is strictly bounded with assumptions. Any changes to the bounded assumptions will result in both parties negotiating an equitable adjustment in the contract, scope, cost and schedule for the IWTU activities. However, in accordance with Section I clause FAR 52.217-7 Option for Increased Quantity—Separately Priced Line Item (Mar 1989), DOE may exercise the IWTU option (CLIN 00006) within 3 years of the contract effective date.~~

C.6.2 Calcine Disposition - High Level Waste and SNF Long Term Planning

The Contractor shall support the development of long-term high level waste and SNF management strategies (both national and Idaho levels) by a separate DOE Prime contractor(s). The Contractor shall establish an Interface Agreement with the the Calcine Disposition and Spent Fuel Repackaging A&E contractor to perform the required services. Support shall include but is not limited to: providing drawings, documents, and technical information; facility descriptions; facility tours, etc. The level of support and specific services provided shall be negotiated with, and paid for by the DOE Calcine Disposition and Spent Fuel Repackaging A&E contractor per an Interface Agreement.

C.6.3 Liquid Waste Facility Closure

The Contractor shall complete closure of the remaining four 300,000 gallon tanks (Tanks WM-187, WM-188, WM-189, and WM-190; including the tank vaults, cooling coils, valve boxes, and ancillary piping) of the INTEC Tank Farm Facility in accordance with the RCRA Closure Plan (DOE/ID-11273, Revision 4 or current version, "Idaho Hazardous Waste Management Act/Resource Conservation and Recovery Act Closure Plan for Idaho Nuclear Technology and Engineering Center Tanks WM-187, WM-188, WM-189, and WM-190, and all Remaining Tank Farm Facility Resource Conservation and Recovery Act Piping", October 2012). The scope includes modifying the RCRA Closure Plan if needed and then completing closure according to the finalized plan. The Contractor shall submit the Professional Engineer's Certification to the state of Idaho in accordance with the finalized RCRA Closure Plan. See the Idaho Department of Environmental Quality (DEQ) website for the text of all the RCRA and air permits, http://www.deq.idaho.gov/permitting/issued-permits.aspx.

The Contractor shall complete RCRA Closure of the INTEC Liquid Waste Management System. This includes modifying if necessary and finalizing the draft DOE/ID-11460 HWMA/RCRA Closure Plan for the INTEC Liquid Waste Management System – Process Equipment Waste Evaporator (PEWE) and Liquid Effluent Treatment and Disposal (LET&D) Systems, March 2012, and then completing closure according to the finalized plan and schedule. A Waste Incidental to Reprocessing (WIR) determination is not required for the LET&D; however, one might be required for the PEWE depending on the Contractor's technical approach.

The Contractor shall complete RCRA Closure of the INTEC New Waste Calcining Facility except for those areas required for RH-TRU packaging and the calcine contaminated transport air lines. This includes modifying if necessary and finalizing the draft DOE/ID-11477 HWMA/RCRA Closure Plan for the INTEC New Waste Calcining Facility (CPP-659), September 2012, and then completing closure according to the finalized plan and schedule. The scope also includes completing a Waste Incidental to Reprocessing (WIR) determination if it is required by the Contractor's technical approach.

The Contractor shall operate the IWTU as needed to process waste generated during the INTEC Tank Farm Closure.

The Contractor may also use the IWTU to process waste generated from the RCRA Closure of the INTEC Liquid Waste Management System, and from the RCRA Closure of the INTEC New Waste Calcining Facility if required by its technical approach. If the Contractor determines it will use IWTU to treat this waste, then the Contractor shall plan for extending the current steam reforming license to cover this waste.

The Contractor shall complete RCRA Closure of the IWTU main processing building and then transition the facility to a safe shutdown condition. This includes flushing the system to the extent practicable and downgrading the treatment facility to less than Hazard Category 3. This includes completing a Waste Incidental to Reprocessing (WIR) determination. The Contractor shall maintain the infrastructure to support the safe and compliant storage of treated Sodium-Bearing Waste (SBW) in the product storage building.

DOE acknowledges that some building demolition by the Contractor may be required in order to complete RCRA closure of the facilities.

The Contractor shall support the DOE Construction/(D&D) prime contractor through strip out of IWTU in preparation of Hot Isostatic Pressing (HIP) unit installation for Calcine treatment in accordance with the necessary Interface Agreement the Contractor shall establish with the separate DOE Construction/D&D prime contractor as defined in Section C.1.1. The level of support and specific services provided shall be negotiated with, and paid for by the DOE Construction/D&D Prime contractor per an Interface Agreement.

C.6.4 Incidental D&D

The Contractor shall complete D&D of MFC-767, EBR-II Reactor Building, per the *Action Memorandum for the EBR-II Final End State, DOE/ID-11426, April 2010.* This includes demolishing the MFC-767 reactor building and placing the final concrete cover over the site.

The Contractor shall complete D&D of MFC-766, Sodium Boiler Building, per the *Action Memorandum for General Decommissioning Activities Under the Idaho Cleanup Project, DOE/ID-11293, Jan 2009*. This includes completing RCRA Closure and demolishing the MFC-766 building and contents.

C.6.5 Calcine Retrieval Project

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The Contractor shall develop a conceptual design and schedule for transferring calcine from Calcine Solids Storage Facility (CSSF)-1 to CSSF-6. The conceptual design and schedule shall be transmitted to DOE by September 30, 2016.

The Contractor shall develop a regulatory strategy for completing RCRA Closure of CSSF-1. The regulatory strategy shall be transmitted to DOE by September 30, 2016.

The Contractor shall support development of the snake arm technology.

C.7.0 SPENT NUCLEAR FUEL (SNF) MANAGEMENT

C.7.1 SNF Programs

C.7.1.01 Spent Nuclear Fuel Management

The 1995 Idaho Settlement Agreement (ISA) governs the removal of spent nuclear fuel from the state of Idaho and requires transfer from wet to dry storage by 2023. The Contractor shall maintain Spent Nuclear Fuel (SNF), SNF records, and operate and maintain SNF facilities including CPP-666 (the fuel basin portion of CPP-666), CPP-603, CPP-749 and CPP-2707 and ancillary facilities at INTEC. The SNF inventories, including current locations, are identified in Exhibit C-18, *Spent Nuclear Fuel Inventory and Plot Plans for CPP-603, CPP-749, and CPP-2707 (OUO).* The SNF is described in Exhibit C-19, *EBR-II Spent Nuclear Fuel Description Document (OUO),* and Exhibit C-20, *INTEC Spent Nuclear Fuel Description Document (OUO).*

Fuel must cool in the ATR canal for approximately 0.9 years (330 days) before it can be transferred to CPP-666. The ATR Spent Fuel Element Transfer Cask may be used by the INL contractor to transfer fuel from ATR to CPP-666. The capacity of the cask is 8 fuel elements.

Fuel must cool in CPP-666 for 5.1 years (1,860 days) before it can be transferred to CPP-603.

Fuel must be dried before being placed in dry storage. The CPP-603 Drying Station is available for use, however, it has not been used since June 2010 and shall require refurbishment before it can be used. The Contractor is not required to use the CPP-603 Drying Station and can locate

equipment to support fuel storage operations at the Contractor's discretion upon DOE concurrence.

There are 636 storage positions (ports) in CPP-603. 550 ports are in use. 58 ports are available for use without modification. 28 ports are inaccessible and cannot currently be used. Additional ports may be made available if the 550 ports currently in use are reconfigured, and/or if facility modifications are made to allow access to the 28 inaccessible ports.

The CPP-749, Underground Fuel Storage Facility contains 218 fuel storage vaults. The Contractor shall assume 62 vaults are available for use and that 24 fuel elements may be stored in each vault. The Peach Bottom Cask may be used to transfer the fuel.

The CPP-2707, Dry Spent Fuel Cask Storage Pad has an additional 14 casks that may be stored on the pad. The maximum cask weight is 140 tons.

The MFC-771, RSWF has 268 liners available for use; each liner is 16" x 12'4". The HFEF-6 cask may be used to transfer fuel from CPP-666 to the RSWF. The HFEF-6 cask holds two cans, and each can holds 8 bottles of fuel.

C.7.1.02 Foreign and Domestic SNF

The Contractor shall maintain the capability to receive and off-load Foreign and Domestic Research Reactor (FRR/DRR) Program SNF for dry storage in CPP-603. The Contractor shall receive one SNF shipment of FRR or DRR per full Government fiscal year thereafter. A list of potential receipt sources is provided in Exhibit C-21, *FRR/DRR Spent Nuclear Fuel Potential Sources.*

The Contractor shall inspect the SNF at the generating reactor, perform criticality and thermal analyses to determine transport and storage configurations, and maintain the security chain of custody from the placement of the SNF in a Contractor provided basket. Therefore, travel to generating reactors for SNF inspection and Contractor presence during loading for transport is required. The transport of SNF from the generating reactor to INTEC is not a Contractor function for DRR SNF. However, for FRR SNF, the Contractor may be requested to arrange transportation of SNF after the SNF arrives in the U.S. The Contractor shall maintain the equipment used to perform inspections and shall ensure compliance with CPP-603 documented safety analysis during the term of the contract. The Contractor shall procure baskets, basket lids, spacers, and storage canisters and lids as needed to place the fuel into dry storage at INTEC.

C.7.1.03 Experimental Breeder Reactor (EBR) - II SNF

The Contractor shall transfer 3,336 bottles of EBR II SNF to MFC for treatment by the INL contractor at the Fuel Conditioning Facility (FCF), or for storage at RSWF, as determined by the INL contractor. The Contractor shall retrieve EBR-II SNF from CPP-666, load it into the DOE provided Hot Fuel Examination Facility (HFEF)-6 cask, place the cask on a trailer, and transfer it to MFC. The Contractor may also use a non-DOE provided transport cask subject to approval by DOE. See Exhibit C-18, Spent Nuclear Fuel Inventory and Plot Plans for CPP-603, CPP-749,

and CPP-2707 (OUO) for fuel inventory and Exhibit C-19, EBR-II Spent Nuclear Fuel Description Document (OUO), for SNF descriptions. The Hot Fuel Examination Facility (HFEF)-6 cask, if used, can transport up to 16 fuel bottles per shipment.

The Contractor shall establish an Interface Agreement (See C.1.01) with the INL contractor detailing how the INL contractor will be provided access to the RSWF.

C.7.1.04 Advanced Test Reactor (ATR) SNF receipts

The Contractor shall receive 15 shipments of ATR SNF per year and place it into storage in CPP-666.

C.7.1.05 ATR SNF Wet To Dry Storage Transfers

The Contractor shall transfer 1000 ATR SNF elements from CPP-666 into dry storage at INTEC. INTEC locations where dry storage is available include CPP-603, CPP-749, and CPP-2707. The Contractor shall perform any necessary maintenance and repairs to the equipment (e.g. crane, shield doors, casks, etc.) and any necessary facility modifications to accomplish this scope of work.

C.7.2 NRC Licensed SNF Storage Facilities

The Contractor shall provide surveillance and monitoring, utilities, office space, general infrastructure support (including facility maintenance and cyber security), and emergency management for the NRC Licensed facility Three Mile Island 2 (TMI-2) Independent Spent Fuel Storage Installation at INTEC. The Contractor shall establish an Interface Agreement with the NRC contractor to perform the required services below. The NRC contractor will oversee the Contractor's performance to ensure compliance with the TMI-2 NRC license. Should a fine or penalty be issued by NRC or DOE resulting from work supporting the NRC license at TMI-2, the DOE will assess the incident and determine contractor (ICP Core or NRC Licensed Facilities) liability for the fine or penalty.

The ICP Core contractor shall perform the following maintenance actions at the TMI-2 Independent Spent Fuel Storage Installation (see Exhibit C-22 *Listing of NRC Documents Applicable to ICP Core*):

1. Perform leak check of the vent housing double metallic seals on each Dry Shielded Canister (DSC) containing TMI-2 CANISTERs in accordance with TPR-7066 *"Periodic Horizontal Storage Module (HSM)Monitoring, DSC Sampling, and Filter Housing Leak Tests*"

   Periodicity of Performance: Every five years during storage starting in 2020.

2. Perform a radiation survey at the vent of each DSC in accordance with TPR – 7066 "*Periodic HSM Monitoring, DSC Sampling, and Filter Housing Leak Tests*"

Periodicity of Performance: Annually in September with a 25% grace period

3. Sample the gas inside each DSC containing spent fuel in accordance with TPR – 7066 "*Periodic HSM Monitoring, DSC Sampling, and Filter Housing Leak Tests*"

   Periodicity of Performance: Annually in September with a 25% grace period

4. Replace the HEPA filter or the DSC after DSC purge is complete as necessary in accordance with TPR – 7069 "*DSC Purging and HEPA Filter Change out*"

   Periodicity of Performance: As necessary

5. Perform sampling in accordance with MCP-2955 "*ISFSI Radiological Environmental Monitoring Program*" that includes:
   a. Monthly airborne radioactivity sampling within the Independent Spent Fuel Dry Storage Installations (ISFSI) perimeter fence
   b. Direct radiation monitoring with Thermoluminescent dosimeters (TLDs) placed along the ISFSI perimeter fence
   c. Periodic loose surface radioactive contamination monitoring adjacent to each DSC vent and purge port and each HSM drain line.

6. Perform aging management activities in accordance with PLN – 4493 "Three Mile Island Unit 2 Independent Spent Fuel Storage Installation Aging Management Program". This will include, but is not be limited to:
   a. Remote visual inspection of DSC, DSC support structure, and DSC Over pack Support Structure in HSM in accordance with TPR-7855 "Remote Visual Inspection of HSM, DSC, And DSC Support Structure".
   b. Annual concrete surface monitoring program as recommended and/or documented in EDF-8465, EDF-8903, EDF-9565, and EDF-9897.
   c. Repair of deteriorated concrete and cracks as necessary recommended in EDF-8465, EDF-8903, and EDF-9516.
   d. Protection against water intrusion recommended in EDF-8465 including sealing and eliminating bolt hole voids (EDF-9516) and application of surface sealer (EDF-9516).
   e. Nondestructive examination recommended in EDF-8903.
   f. Remote visual inspection of HSM in accordance with TPR-7855 "Remote Visual Inspection of HSM, DSC, And DSC Support Structure"

C.7.3 Navy Nuclear Propulsion Program (NNPP) SNF

By June 30, 2018, the Contractor shall retrieve, load the cask, and place cask on trailer for departure of all NNPP SNF currently stored in the INTEC CPP-666 fuel basins. See Exhibit C-23, *Memoranda of Agreement (MOA) for Naval Spent Nuclear Fuel Transfers and Disposition*. The Contractor shall receive Large Cell Casks (LCCs) from NRF on the INL Site and load and ship the casks back to NRF (approximately 13 shipments in Government Fiscal Year 2016 with six LCCs scheduled to be shipped during the time period of June 1, 2016 through September 30,

2016, approximately 17 shipments in FY 2017, and approximately 5 Shipments in FY 2018 for a total of approximately 35 total shipments). All work is done under the CPP-666 authorization basis (SAR/TSR-113), but procedures and equipment designs that interface with NNPP SNF must be approved by NNPP. Equipment required for SNF handling shall be designed, fabricated, and tested by the Contractor. The Contractor shall prepare a data package fully describing the SNF in each cask-load and the position of each element within the load. This package shall pass quality assurance review by Naval Reactor Facilities (NRF) prior to cask shipment. The Contractor shall retain a copy of all records related to NNPP SNF and maintain secure records storage. The Contractor shall perform required maintenance in CPP-666 (the fuel basin portion of CPP-666) from GFY 2016 through GFY 2018.

The Contractor shall coordinate the schedule for cask transfers with the NNPP and shall consider the ability of NRF to receive a cask as well as coordination with other INTEC SNF management and CPP-666 Flourinel Dissolution Process cell operations. Security Level L clearances shall be required for all staff involved in NNPP SNF. A secure conference room with electronic communications equipment, located in CPP-666, shall be maintained for the use of NNPP staff. NRF staff may be present during SNF handling and NNPP senior staff will tour the facility on a periodic basis. DOE provides monthly reports to NNPP using the Contractor's monthly A3 report and additional information including, but not limited to, tracking of management reserve and emerging issues expenditures.

The Contractor shall disposition all low-level waste generated during SNF operations. The Contractor shall disposition tools, materials, and equipment used by the Contractor as agreed with NNPP.

C.8.0 PROGRAM MANAGEMENT AND SUPPORT FUNCTIONS

The Contractor shall establish program management, support and general infrastructure activities necessary to safely execute the PWS requirements. When more than one contractor works in a shared workplace, the Contractor shall coordinate with the other contractors to ensure roles, responsibilities, and worker safety and health provisions are clearly delineated. If a reportable incident related to the NRC Facilities contract, D&D and Construction contract, A/E contract and/or another DOE prime contract (e.g. personnel injury, notice of violation, safety, security, quality, radiological) occurs while doing work at the Idaho Site, any such incidents will be reported in their respective statistics and will not contribute toward the Contractor statistics or reflect on Contractor performance as incentivized in PI-3.

C.8.1 Information Management and Technology

C.8.1.01 Information Technology and Cyber Security

The Contractor shall manage and maintain a secure automated information system, server operations and firewall support and all other information technology (IT) support for their missions. The Contractor shall provide DOE access to the Contractor's local systems and databases as necessary to support DOE's contractor oversight efforts. The Contractor shall also

provide a cyber-security program that ensures adequate protection of DOE's IT operations, identifies threats and vulnerabilities, assesses overall risk to the systems, provides incident response, system logging and mitigates those risks.

The Contractor shall establish necessary Memorandums of Understanding (MOU's) and Interconnection Security Agreements between the INL contractor, DOE-ID and DOE HQ for any necessary computing services. All parties will accept the responsibility for adhering to DOE Directives, National Policy and OMB guidance. The Contractor shall obtain all necessary Federal Information System Management Act (FISMA) system certifications from the INL Site Authorizing Official.

The Contractor shall ensure IT services such as network backbone, remote connectivity, and wireless communications (cell, radio, etc.) are available to support the contract missions. This scope also includes Telecom Management/Planning/Control.

The Contractor shall provide support for DOE IT Capital Planning & Investment Control, Enterprise Architecture, and other IT activities required for the Contractor's operation.

C.8.1.01.01 Network Access

The Contractor may negotiate Network Access with the INL contractor for IT services if located within INL facilities or off-site. If Contractor is located off-site from the INL, the Contractor will incur installation and all related connectivity costs. If Contractor is on-site, the INL contractor provides and maintains basic data service to the existing data jacks within the protected network based on the number and location of connections in service at the time of turnover in accordance with negotiated or established rates. Costs associated with minor moves and relocations within existing EM facilities may be provided by the INL contractor at established rates.

If the Contractor negotiates access to the INL Network, the Contractor shall comply with the INL Cyber Security requirements and processes. The INL contractor may provide firewall operation, intrusion detection, antivirus management, SPAM filtering and associated engineering with any potential negotiated costs to the Contractor. The Contractor will reimburse the INL contractor for licensing and support costs as applicable via the necessary Interface Agreement. All Contractor equipment connected to the protected INL Intranet shall meet INL computer architecture requirements to ensure continued network integrity.

Services provided by DOE-HQ IT services such as connectivity to DOENet and Entrust licenses will be provided by the INL contractor. The Contractor will reimburse the INL contactor via the necessary Interface Agreement.

C.8.1.01.02 Computer Operations

The INL contractor may provide logical "de-militarized zone" (DMZ) space. The Contractor shall follow cyber security rules and change control processes for systems

residing in the DMZ. The Contractor shall self-supply network servers or negotiate for services from the INL contractor. The Contractor shall self-supply business management, e-mail, and work control systems, as desired. The Contractor shall provide remote access to allow the Department of Energy access to information, within the scope of this contract, within the Contractor's firewall.

C.8.1.02 Records Management and Document Control

The Contractor shall manage and serve as the Record Custodian for all records (regardless of media) generated/received in the performance of the Contract and those from the NRC License Contractor in accordance with 44 U.S.C. 21; 44 U.S.C. 29; 44 U.S.C. 31; 44 U.S.C. 33; 44 U.S.C. 36; 36 CFR Chapter XII, Subchapter B, *Records Management*; DOE O 243.1B, Records Management Program,, applicable NRC requirements (NRC License Contractor records), any other DOE requirements as directed by the CO and an approved Records Management Plan (see Section J, Attachment J-2, List of Deliverables).

This scope also includes maintaining Vendor Data, Correspondence control, Scientific and Technical Information (STI), and Technical Library Subscriptions.

C.8.1.02.01 Electronic Records (including emails)

The Contractor shall develop and implement records management controls to ensure that the identification, maintenance and disposition of all records (regardless of media), including electronic, email and records turned over by the NRC License contractor, are managed utilizing an Electronic Records Management System (ERMS) in accordance with Federal and DOE requirements and guidelines for all records, including historical and subcontractor records.

The Contractor shall develop and implement a process to ensure electronic records submitted to Records Management, have been scanned to meet NARA requirements. All records (regardless of media) must be scheduled, arranged, and cutoff by collections (e.g., case file, project, chronologically, numerically, alphabetically, etc.) for proper disposition in accordance with the NARA-approved DOE Records Disposition Schedules.

C.8.1.02.02 Audiovisual Records

The Contractor shall ensure the creation, maintenance, and storage of audiovisual records are in accordance with 36 CFR 1235.42, 36 CFR 1237, and up-to-date NARA requirements/guidance.

C.8.1.02.03 Vital Records Program

The Contractor shall develop and implement a vital records program, and maintain an up-to-date vital records inventory in accordance with 36 CFR § 1223, Managing Vital Records, and DOE O 243.1B, Records Management Program.

C.8.1.02.04 Records Ownership

Except for those defined as Contractor-owned (in accordance with DEAR 970.5204-3, "Access to and Ownership of Records," see Section I), all records (see 44 U.S.C. 3301, Definition of Records, for the statutory definition of a record) acquired or generated by the Contractor (and subcontractors) in the performance of this Contract including, but not limited to, records from a predecessor contractor (if applicable) and records described by the Contract as being maintained in Section H clause *Privacy Act Systems of Records* shall be the property of the Government.

C.8.1.02.05 Creation/Receipt

The Contractor shall develop and implement recordkeeping requirements that reflect adequate and proper documentation of all Contractor (and subcontractor) records generated / received (regardless of media) in the performance of the contract, as well as those created/received by the NRC License Contractor as required by Federal regulations found in 36 CFR, Chapter XII, Subchapter B, *Records Management*.

C.8.1.02.06 Electronic Information Systems

The Contractor shall manage records contained in electronic information systems by incorporating recordkeeping controls into the system or export the records into the ERMS in accordance with 36 CFR Part 1236, Electronic Records Management. The Contractor must design and implement migration strategies to counteract hardware and software dependencies of electronic records whenever the records must be maintained and used beyond the life of the information system in which the records are originally created and captured. The Contractor shall provide a list of all Electronic Information Systems to DOE annually utilizing the format provided by DOE (see Section J, Attachment J-2, List of Deliverables).

C.8.1.02.07 Inventory and File Plan

The Contractor shall develop and maintain up-to-date records inventories, file plans and systems that provide for the identification, location, arrangement, assignment of disposition authority and retrieval of all categories (record series) of records created and received in performance of this contract and those by the NRC License Contractor (see Section J, Attachment J-2, List of Deliverables).

C.8.1.02.08 Maintenance

The Contractor shall ensure the proper arrangement, disposition authority assignment and maintenance/preservation of all records created and received in performance of this contract and those by the NRC License Contractor.

C.8.1.02.09 Quality Assurance Records

The Contractor shall ensure records identified as Quality Assurance records under American National Standards Institute (ANSI)/American Society of Mechanical Engineers (ASME) National Quality assurance (NQA)-1 are categorized (lifetime/non-permanent); managed in accordance with NQA-1 and 36 CFR Chapter XII, Subchapter B; and are maintained for traceability to the applicable item, activity or facility.

C.8.1.02.10 Privacy Act Records

The Contractor shall ensure records that contain personal information retrieved by name, or another personal identifier are maintained in Privacy Act Systems of Records, in accordance with FAR 52.224-2, Privacy Act,, and DOE O 206.1, DOE Privacy Program..

C.8.1.02.11 Classified Records

The Contractor shall protect and handle classified information and critical information in accordance with applicable laws, regulations, policies, and directives. Classified documents may be processed electronically so long as the computer systems meet all classified security requirements. Until the required computer systems are available to copy, log, process, transmit, and/or store classified documents, they shall be processed as hard copy. See Section C.8.2, Safeguards and Security.

C.8.1.02.12 Records Requests

The Contractor shall respond to National Archives and Records Administration (NARA) data calls and DOE requested information for the Freedom of Information Act (FOIA), the Privacy Act, the former worker medical screening program, the Chronic Beryllium Disease Prevention Program, congressional inquiries, legal discoveries and other record requests by completing the proper searches and providing responsive documents

The Contractor shall respond to Energy Employee Occupational Compensation Act (EEOICPA) requests by performing the proper searches and providing responsive documents to the INL Contractor within the required response times. The Contractor shall track the activities under EEOICPA and submit monthly financial reports to the INL contractor. The Contractor shall respond to any other inquiries and perform special projects as required by EEOICPA.

C.8.1.02.13 Records Disposition

The Contractor shall document its disposition process, which shall include processing of all records to storage (e.g., on-site, FRC) and the destruction process for records and information content (Section J, Attachment J-2, List of Deliverables). The Contractor shall disposition all records, including historical and those transferred from the NRC License Contractor in accordance with NARA-approved DOE Records Disposition Schedules and applicable federal laws and regulations. Disposition activities include

scanning to electronic (permanent records), transferring of papers records to a Federal Records Center (FRC), maintaining electronically in an ERMS and/or destroying once retention has been met and proper approves obtained.

C.8.1.02.14 Document Control

The Contractor shall develop, implement and maintain sound document control systems and processes to ensure efficient tracking, retrieval, revision control and distribution of documents, including drawings.

C.8.1.02.15 Records Storage Program

The Contractor shall operate the INL Records Storage Facility (IF-663) and provide record management services including: transferring, storing, maintaining records; and dispositioning inactive records. Management of non-ICP records shall be addressed in interface agreements on a cost reimbursable basis. The INL contractor is the landlord of this facility.

The Contractor shall operate and maintain electronic records storage.

C.8.2 General Management and Administration Services

C.8.2.01 Project Management/Support/Administration

The Contractor shall perform Project Management support and administration in accordance with Section H Clause, *Integrated Work Control Systems and Reporting Requirements* and Section H Clause *Earned Value Management System.*

This scope shall also include the following internal Contractor activities as necessary to successfully execute the contract: Idaho Falls Office Space, Employee Concerns, Internal Audit, Communications, General Counsel/Legal, Project Planning and Integration, Project Controls, Project Management, Finance and Accounting, Payroll and Benefits, Human Resources, Procurement, Labor Relations, Subcontracting, Materials Receiving and Distribution, Liability Insurance Programs, insurance premiums, etc.

C.8.2.02 Safeguards and Security

The Contractor will be provided Safeguard and Security (S&S) services by the INL Contractor. The level of S&S services provided by the INL Contractor to the ICP Core Contractor will be consistent with the requirements included in the INL contract, see http://www.id.doe.gov/doeid/INLContract/INLHomepage.html, as approved by the Officially Designated Federal Security Authority (ODFSA), and in accordance with the Site Security Plan [see Exhibit C-25, *INL Site Security Plan (OUO)*]. The Contractor shall coordinate with the INL contractor to adopt and update the INL Site Security Plan within 90 days after the contract effective date. Any changes to INL Contractor requirements and Departmental directives will be evaluated and any costs impacts associated with requirement changes or changes in level of

services requested will be borne by the program office (e.g., EM, NE) whose activities are affected by the changes.

Costs for repairs to the security systems and components located within the security buildings will be borne by the INL Contractor. However, costs for repairs or upgrades to security systems and components that feed into the site-wide Central Alarm Station at INTEC (CPP-1674) shall be borne by the respective user organization (e.g, EM, NE).

The Contractor shall provide resources, materials, and programs to provide appropriate levels of protection against unauthorized access, theft, diversion, loss of custody of accountable nuclear material, espionage, loss or theft of classified matter, loss or theft for Government property, and other hostile acts that may cause unacceptable adverse impacts on national security or the health and safety of DOE and Contractor employees, the public, or the environment. This applies to buildings and areas for which the Contractor is responsible, including TMI-2. The Contractor shall perform the Safeguards and Security activities listed below, in addition to those addressed in the INL Site Security Plan, in order to provide these necessary resources, materials, and programs. These activities shall be included in the Contractor's target cost and shall include, but are not limited to:

(a) Program Management: The Contractor maintains personnel and resources for safeguards and security. The Contractor shall ensure its security assets and activities comply with the INL Site Security Plan.

(b) Foreign National Visits/Assignments (through INL contractor system): Foreign National Visits/Assignments are initiated by the Contractor through the Foreign Access Central Tracking System (IFACTS) database. The INL contractor provides foreign national visit and assignment security support to the Contractor.

(c) Information Security Oversight: The Contractor shall ensure all documents are reviewed and approved for public release. The Contractor is responsible to ensure all internal documents are reviewed for classification as necessary. The INL contractor provides classification services to the Contractor.

(d) Classified Matter Protection and Control (CMPC):

i. The INL contractor provides CMPC training to the Contractor as required.
ii. The Contractor shall ensure that all personnel handling classified matter receive required training.
iii. The Contractor shall develop and implement appropriate systems for protection of classified matter.

(e) Security Incidents/Inquiries: The Contractor shall conduct initial assessments of security incidents and make final determinations regarding security infractions to Contractor personnel. The INL contractor conducts all formal security incident inquires and develops reports for submittal to DOE.

(f) Physical Security: The Contractor shall ensure services provided by the INL contractor meet applicable DOE requirements and inform both the INL contractor and the CO of changes in needed services and issues with the services provided.

(g) Security Systems (locks-keys/alarms/access controls, classified storage areas, badge readers): The Contractor shall be responsible for all locks and keys. The Contractor shall be responsible for new alarms, cameras, and access control equipment for new projects. The INL contractor provides scheduled maintenance, alarm testing, and system upgrades.

(h) Operations Security (OPSEC): The Contractor shall provide appropriate project personnel to support its own OPSEC program and participate as a member of the INL site wide OPSEC working group. The Contractor shall conduct OPSEC reviews of projects and facilities as required by DOE orders referenced herein. The INL contractor manages the INL site-wide OPSEC program.

(i) Classification/Declassification/Unclassified Controlled Information: The Contractor shall nominate personnel and maintain Derivative Classifiers (DCs) as necessary to support operational programs in coordination with the INL classification office. The INL classification program provides training and classification services to the Contractor.

(j) Nuclear Material Control and Accountability (NMC&A): The Contractor shall maintain a Nuclear Material Representative (NMR) and appoint Material Balance Area Custodians (MBACs) as necessary. The INL contractor provides all necessary training to the Contractor MBACs, conducts nuclear material inventories, and maintains nuclear material inventory records of nuclear materials and core NMC&A project support.

(k) Facility Data Approval Record & Contract Security Classification Specification (FDAR/CSCS): The Contractor shall perform all FDAR/CSCS requirements.

(l) Foreign Ownership, Control, or Influence (FOCI) processing: The Contractor shall maintain all FOCI requirements as necessary.

(m) Visitor Control/Vehicle Access: The Contractor shall utilize the INL site wide visitor access control process and comply with vehicle access controls. The INL contractor provides visitor controls services to the Contractor.

(n) Personnel Security: The Contractor shall be responsible for pre-employment background investigation for all new hire and sub-contractor personnel. Individuals that require a clearance are subject to an Office of Personnel Management (OPM) background investigation. The INL contractor provides personnel security services to the Contractor.

The Contractor shall promptly prepare and submit applications for security clearances, for adjudication by DOE-ID, as required for work under this contract.

(o) Coordination and liaison with DOE security organizations and DOE contractor security organizations, including the protective force of the INL contractor: The Contractor shall

coordinate security service requests with the INL contractor and shall ensure appropriate coordination and liaison with the DOE security organization.

The Contractor shall coordinate with the INL protective force for non-routine activities (e.g. security support for road outages, construction security escorts, on-site transportation security escorts, involuntary separations, increased security checks, and other requests as deemed necessary by the Contractor).

The Contractor shall provide Identity, Credential and Access Management in compliance with DOE Order 206.2, Identity, Credential, and Access Management (ICAM).). This includes issuance of Homeland Security Presidential Directive (HSPD)-12 badge credentials for all qualified Contractor personnel, cleared and uncleared, and implementation of the necessary capabilities to provide access to Federal facilities or systems. A proposed HSPD-12 Badge Implementation Plan shall be submitted to DOE for approval within 30 days after the Contract Effective Date.

C.8.2.03 Public Affairs/Stakeholder Relations

The Contractor shall provide public affairs services in accordance with DEAR 952.204-75 *Public Affairs* that include, but are not limited to: stakeholder and oversight organization support, media relations, tours, visits, access to documents. The Contractor shall provide necessary technical support to DOE and participate in stakeholder activities at the direction of the Contracting Officer.

C.8.2.04 Property Management

The Contractor shall manage all government property utilized under this contract. As of the contract effective date the Contractor shall accept the transfer of and accountability for government property and equipment, including special nuclear material. This requirement includes government property in the possession or control of subcontractors. The Contractor shall establish and maintain a system, in accordance with Section I clause FAR 52.245-1 *Government Property* and DOE Order 580.1A, Department of Energy Personal Property Management Program, to manage Government property in its possession. The Contractor Personal Property Management System shall be submitted to DOE for review and approval within 90 days of the contract effective date (see Section J, Attachment J-2). All Government Furnished Property (GFP) under this contract is furnished on an “as is/ where is” basis.

The Contractor shall coordinate with the INL contractor to identify new acquisitions (both capitalized equipment purchases and construction projects) to financially capitalize the property. The Contractor shall identify equipment and facilities that are disposed of to ensure timely financial write-off of the assets balance in the INL contractor accounting records.

The Contractor shall disposition personal property in accordance with the Personal Property Management Program, DOE Order 580.1A; the MOU between the DOE-ID and the Regional Development Alliance Inc., dated January 2011; and Federal Property Management Regulation 41 CFR Part 102-36, Disposition of Excess Personal Property.

The Contractor shall disposition classified equipment and material in accordance with the requirements of DOE O 580.1A.

The Contractor shall identify, control, and disposition high-risk property in accordance with DOE Order 580.1A. The Contractor shall identify, control, and disposition Automatic Data Processing Equipment in accordance with DOE O 580.1A and DOE Manual 205.1B, Department of Energy Cyber Security Program. The Contractor shall disposition nuclear-related or proliferation sensitive property in accordance with the requirements of DOE O 580.1A.

The Contractor shall develop and maintain a program for the acquisition, maintenance, and operation of equipment. The program shall comply with any and all applicable federal laws and regulations, state and local laws, and property management requirements.

C.8.2.04.01 Real Property Services

The Contractor shall comply with DOE O 430.1B, "Real Property Asset Management," for the acquisition, management and disposition of real property assets. The Contractor shall input and maintain all data required to be included in the Facility Information Management System (FIMS).

C.8.2.04.02 Personal Property

The Contractor shall manage all personal property assigned/Government Furnished Equipment (GFE) in accordance with DOE O 580.1A, Department of Energy Personal Property Management Program. The Contractor shall also routinely input data and maintain the Property Information Database System (PIDS). A list of Government Furnished Equipment is included as Exhibit C-24.

C.8.2.04.03 Replacement of Government Furnished Property

The replacement of Government Furnished Property for which title shall pass to and vest in the Government shall be the responsibility of the Contractor. The Contractor shall assume the risk of any loss, damage, or destruction of Government Furnished Property in accordance with FAR 52.245-1, Government Property

C.8.2.05 Phase Out and Closeout Activities

The Contractor recognizes that the work and services covered by this contract are vital to the DOE mission and must be maintained without interruption, both at the commencement and the expiration of this Contract (also see Section H clause *Transition to Follow-On Contract (Post 2020)*).

C.8.2.05.01 Phase Out Activities

(a) The Contractor shall submit a Phase-Out Transition Plan to include its approach to adequately phase-out all Contract activities. The Phase-Out Transition Plan shall be submitted in accordance with this PWS and Section J, Attachment J-2, List of Contract Deliverables/Submittals, at least 60 days prior to the end of the contract period.

(b) The Contractor shall perform those activities that are necessary to transition the work under this contract to a successor Contractor in a manner that (1) ensures that all work for which the Contractor is responsible under the contract is continued without disruption; (2) provides for an orderly transfer of resources, responsibilities, and accountability from the Contractor; and (3) provides for the ability of the Contractor to perform the work in an efficient, effective, and safe manner.

(c) The Phase-Out Transition Plan shall include a proposed date by which the Contractor will assume responsibility from the outgoing contractor. The outgoing contractor will maintain full responsibility for such work until assumption thereof by the Contractor. Execution of the proposed plan or any part thereof shall be accomplished in accordance with the CO's direction and approval.

(d) The Phase-Out Transition Plan shall also include a schedule of major activities, and address as a minimum:

- A training and orientation program for the successor contractor to cover the complete scope of work covered by the Contract and other specific requirements associated with work efforts at the Idaho site;
- Communication process among DOE, the Contractor, assigned subcontractors, incumbent employees, and the successor contractor and/or subcontractors;
- Identification of key transition issues and milestones;
- Identification of a transition team (inclusive of consultants and teaming members, if any);
- Approach to minimizing impacts on continuity of operations;
- Dispute resolution;
- Transition of programs, plans and projects;
- Transition and/or modification of necessary permits, which shall include list of permits and purpose.
- Transition of existing management and operating systems, plans, procedures, programs (e.g., Worker Safety and Health plan, QA plan, ISMS program, Occupational Radiation Protection Program, Waste Management Program, Records Management Program, etc.);
- Transition of all Contract responsibilities, functions, and activities;
- Transition of all interface control documents; and
- Transition of any other documents or records that would be required for a successor contractor to adequately and efficiently perform.

Upon DOE approval of the Phase-Out Transition Plan, the Contractor shall complete the activities described in the plan by the end date of the contract.

C.8.2.05.02 Close Out Activities

(a) The Contractor shall submit a Closeout Plan to document the necessary steps the Contractor shall take to adequately closeout the contract. The Closeout Plan shall include a schedule of major activities, and address at a minimum:

- Identification of all contract deliverables submitted and accepted. The Contractor shall include date submitted, DOE acceptance date (if applicable) and status of any remaining open deliverables;
- Status of all requirements (complete and incomplete) under this contract;
- Identification of all subcontracts along with status of each subcontract's settlement and final payment. The Contractor shall identify for each subcontract under this contract whether final invoices have been paid, date of final payment, current status of settlement, and any other outstanding issues related to final settlement and payment of subcontracts;
- Disposition of Government property and equipment, including special nuclear material;
- Status of activities performed in accordance with the Contractor's Records Management Close-Out or Transition Plan
- Status of the final invoice and any incurred cost audit; and
- Status of the final Contractor Performance Assessment Report System (CPARS) report.

(b) The Closeout Plan shall be submitted in accordance with this PWS and Section J, Attachment J-2, List of Contract Deliverables/Submittals, at least 60 days prior to the end of the contract period. Final payment may be withheld by DOE until all of the necessary activities are completed by the Contractor.

Upon completion of the contract, a final modification will be executed to officially close out the contract. A final release statement will be included in the closeout modification where the Contractor discharges the Government, its officers, agents and employees from all liabilities, obligations and claims under the contract.

C.8.2.06 Mandatory and Optional Site Services

The Contractor shall purchase mandatory site services from the INL contractor, as listed in Exhibit C-2 *List of Mandatory and Optional Site Services*, for the contract performance period, in accordance with the interface agreements established in C.2.1.01. Optional services identified in Exhibit C-2, or other optional services as agreed to by the parties, are available to the Contractor for purchase from the INL contractor as the Contractor deems necessary for the contract performance period, in accordance with the interface agreements established in

C.2.1.01. The various mandatory and optional site services are further described in the various subsections below within C.8.1 through C.8.5.

In the event the Contractor determines that some of the mandatory services may be obtained from more cost effective sources of supply, the Contractor shall notify DOE of its proposal to utilize other sources. DOE approval will be obtained prior to changing mandatory service providers.

C.8.3 Environment, Safety, Health and Quality

C.8.3.01 Defense Nuclear Facility Safety Board

The Contractor shall conduct activities in accordance with those DOE commitments to the DNFSB which are contained in implementation plans and other DOE correspondence to the DNFSB. The Contractor shall support preparation of DOE responses to DNFSB issues and recommendations which affect or can affect contract work. Based on Contracting Officer direction, the Contractor shall fully cooperate with the DNFSB and provide access to such work areas, personnel, and information as necessary. The Contractor shall maintain a document process consistent with the DOE manual on interface with the DNFSB. The Contractor shall be accountable for ensuring that subcontractors adhere to these requirements.

C.8.3.02 Regulatory Interaction and Environmental Services

The Contractor is authorized to negotiate with regulatory agencies as specified in the regulatory interface protocol, and subject to DOE approval. The Contractor shall work with DOE, regulatory agencies, and other INL entities and contractors to reach collective agreements on interface protocols; keep the *Environmental Regulatory Structure and Interface Protocol for the ICP Core Contractor* (Exhibit C-6) updated; and follow the protocol.

The Contractor shall maintain an environmental monitoring, analysis, and assessment program, to detect impacts of EM operations and to comply with DOE orders, regulations, and agreement requirements. The Contractor shall coordinate its monitoring and surveillance program with the INL contractor to prevent duplication of monitoring efforts and ensure the INL site monitoring program is technically based and adequate to identify impacts from operations. The environmental monitoring program shall provide for on-site effluent monitoring; both on- and off-site environmental surveillance to measure both radiological and non-radiological constituents; and both on- and off-site erosion control monitoring, as required for specific contractor operations. Monitoring and surveillance includes both the continuous recording of data and the collecting of soil, sediment, water, air, and other samples at specific times. Evaluation and analysis of such data will be performed, as requested. Further, the Contractor shall install additional or modify existing monitoring locations as required or requested by DOE and/or regulatory agencies. The Contractor shall also conduct other monitoring, sampling, or inspection work as required by existing or future agreements with DOE or regulatory agencies.

The Contractor shall operate and maintain the existing Hydrogeologic Data Repository and the Comprehensive Well Inventory database. The Contractor shall provide full access to all site contractors and DOE, as needed.

The Contractor shall assume applicable responsibilities, in accordance with the Endangered Species Act, for candidate species on the INL, e.g., the sage grouse and pygmy rabbit, and for the Candidate Conservation Agreement with the U.S. Fish and Wildlife Service.

The Contractor shall support DOE for the purpose of complying with the Natural Resource Damage Assessment requirements under Section 107(a) and 120(a) of CERCLA.

The Contractor shall sample and report the results for the drinking water systems at INTEC and RWMC in compliance with the Safe Drinking Water Act.

The Contractor shall, early in the planning stage of any proposed activity that may trigger agency compliance with the National Environmental Policy Act (NEPA), inform DOE in writing of the proposed action. For proposed CERCLA actions, NEPA values must be addressed to the extent practicable and documentation of how those values are addressed shall be provided to the NEPA Compliance Officer before the action proceeds. All information submitted to DOE by the Contractor shall be presented in a manner and extent that allows DOE to comply with NEPA requirements and to make a NEPA determination. The proposed activity may not proceed until all NEPA requirements have been satisfied. The proposed activity shall be compliant with DOE NEPA published at 10 CFR 1021, National Environmental Policy Act Implementing Procedures and the DOE's NEPA/CERCLA Policy. The Contractor shall adhere to all requirements and conditions, including the implementation of mitigation measures, identified in any applicable NEPA decision document or categorical exclusion upon which a NEPA determination is based.

C.8.3.03 Permits and Compliance Documents

The Contractor shall maintain and comply, including reapplications as necessary, with all applicable site environmental permits and compliance documents including, but not limited to:

- RCRA permits;
- Air permits;
- Waste Water Recycle and Reuse permits;
- Site Treatment Plan under the Federal Facility Compliance Act;
- Notice of Noncompliance Consent Order, dated April 1992 et seq;
- Federal Facility Agreement and Consent Order (FFA/CO), dated December 1991;
- Idaho Settlement Agreement, dated October 1995; and
- Agreement to Implement, dated July 1, 2008 per the U.S. District Court Order dated, May 25, 2006.
- DOT Hazardous Material Regulations (HMR) per 49 CFR 107.105.

A list of environmental permits is provided as Exhibit C-1, *List of Current Environmental Permits Applicable to EM INL Site Work Scope*.

The Contractor shall be the lead on site-wide issues related to RCRA and the Idaho Hazardous Waste Management Act (HWMA) and implementing regulations; Federal Facilities Compliance Act (FFCA) Site Treatment Plan; and CERCLA under the FFA/CO. For those compliance areas, the Contractor shall complete and submit (after appropriate coordination with all involved Idaho Site entities) site-wide level regulatory reports, site-wide consent order and agreement tracking and closure information, and site-wide permit applications (including permitting operations or facilities included in the Site Treatment Plan). The Contractor is not responsible for facility-specific regulatory compliance, record keeping, and permit applications at facilities it does not manage.

Facility-specific issues or actions related to current or ongoing facility-specific permit applications, releases to the environment, and compliance issues are the responsibility of the contractor managing the facility.

C.8.3.03.01 Certifications

The Contractor shall provide a written certification statement attesting that information DOE is requested to sign was prepared in accordance with applicable requirements. The Contractor shall include the following certification statement in the submittal of such materials to DOE:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

The certification statement shall be signed by the individual authorized to sign such certification statements submitted to federal or state regulatory agencies under the applicable regulatory program.

C.8.3.04 Environmental Support to INL Contractor

Since the INL contractor has the site-wide coordination role for all regulatory programs except RCRA and CERCLA, the Contractor shall provide the INL contractor with the appropriate information, data (certified if necessary), and support necessary to complete its site-wide functions including, but not limited to, the following areas:

- Site-wide air emission applications, permits, and reporting per the Clean Air Act and the Idaho implementing regulations; and reporting per the National Emission Standards for Hazardous Air Pollutants (NESHAPs).
- Site-wide monitoring, surveillance, and reporting for liquid effluents, drinking water, storm water, and groundwater to demonstrate compliance with the Clean Water Act, Safe Drinking Act, and other water quality requirements.

- Soils, air, and biota surveillances and monitoring to determine the impact of operations on the environment and natural resources.
- Site-wide compliance reports, data, and records required by the Toxics Substance Control Act, Federal Insecticide, Fungicide and Rodenticide Act, Emergency Planning and Community Right to Know Act, and cultural resource management laws and regulations.
- National Environmental Policy Act (NEPA) actions
- Input to the Annual Site Environmental Report shall be provided annually to the designated DOE environmental surveillance, education, and research contractor.
- Asbestos notifications for renovations

C.8.3.05 Worker Safety and Health

The Contractor shall comply with all applicable safety and health requirements set forth in 10 CFR 851, Worker Safety and Health Program. The Contractor shall develop, implement, and maintain a written Worker Safety and Health Plan (WSHP) which shall describe the Contractor's method for complying with and implementing the applicable requirements of 10 CFR 851. The Worker Safety and Health Plan (WSHP) shall be submitted for approval at least 30 days prior to contract effective date. The WSHP must be approved by DOE by the contract effective date. The approved WSHP shall be implemented prior to the start of work. In performance of the work, the Contractor shall provide a safe and healthful workplace, and must comply with its approved WSHP and all applicable Federal and state environmental, health, and safety regulations. The Contractor shall take all reasonable precautions to protect the environment, health, and safety of its employees, DOE personnel, and members of the public. The Contractor shall take all necessary and reasonable steps to minimize the impact of its work on DOE functions and employees. When more than one contractor works in a shared workplace, the Contractor shall coordinate with the other contractors to ensure roles, responsibilities, and worker safety and health provisions are clearly delineated.

The Contractor shall immediately report all job-related injuries and/or illnesses which occur in any DOE facility to the Contracting Officer’s Representative. Upon request, the Contractor shall provide a copy of occupational safety and health self-assessments and/or inspections of work sites for job hazards for its DOE facilities to the Contracting Officer’s Representative.

The Contracting Officer will notify the Contractor, in writing, of any noncompliance with the terms of this section, plus the corrective action to be taken. After receipt of such notice, the Contractor shall immediately take corrective action.

In the event that the Contractor fails to comply with the terms and conditions of this section, the Contracting Officer may, without prejudice to any other legal or contractual rights, issue a stop work order halting all or any part of the work. Thereafter, a start order for resumption of the work may be issued at the discretion of the Contracting Officer. The Contractor shall not be entitled to an equitable adjustment of the Contract amount or extension of the performance schedule on any stop work order issued under this special Contract requirement.

The Contractor shall maintain medical records of former workers and make them available for health effects studies as requested by DOE. Medical records shall be maintained in accordance with 10 CFR 851 and any other applicable codes, laws, requirements or regulations.

The Contractor shall obtain, review and maintain a Material Safety Data Sheet (MSDS) in a readily accessible manner for each hazardous material (or mixture containing a hazardous material) ordered, delivered, stored or used; and maintain an accurate inventory and history of use of hazardous materials at each use and storage location. The MSDS shall conform to the requirements of 29 CFR 1910.1200(g) and FAR 52.223-3, Hazardous Material Identification and Material Safety Data.

C.8.3.06 Occupational Medical Program (OMP)

The Contractor shall provide for its employees an OMP in compliance with 10 CFR 851. The Contractor may purchase this service from the INL contractor. A documented section in the WSHP describing the Contractor's OMP is required. 10 CFR 851 Appendix A specifies the written requirements of the OMP program that the WHSP must address. At a minimum, the WHSP for DOE approval needs to provide sufficient information or reference to another document (e.g., procedure, other) which describes the Contractor's (and its subcontractors') planned implementation of the OMP program in Appendix A, Section 8.

C.8.3.07 Integrated Safety Management System (ISMS)

The Contractor shall establish and maintain a single ISMS program as required by Section I clause DEAR 970.5223-1, *Integration of Environment, Safety and Health into Work Planning and Execution.* The ISMS program shall ensure that safety and environmental protection considerations are integrated throughout the entire work planning and execution process (including subcontracts as appropriate) and shall extend through the execution of individual work packages where job-site safety is ensured for each worker. The Contractor shall ensure that the principles of ISMS serve as the foundation of the implementing mechanisms for work at the site. A comprehensive Environmental Management System (EMS) based upon the ISO14001 EMS standard must be integrated into the ISMS. The EMS shall include measures to address federal sustainability requirements in compliance with DOE Order 436.1, *Departmental Sustainability* and other applicable DOE Orders referenced herein, and the DOE Strategic Sustainability Performance Plan. The EMS shall be certified to the ISO14001 standard by an accredited independent registrar within eight months after contract effective date. The Contractor shall ensure workers are involved in work planning and integrate the concepts of continuous improvement into work activities, including the use of independent certifications (e.g., the International Organization for Standardization (ISO) and Voluntary Protection Program (VPP) Star).). The Contractor shall submit a compliant ISMS program description document for DOE review and approval, and be prepared for Phase I verification within four months after contract effective date. The Contractor shall be prepared for Phase II verification within eight months after contract effective date. Once the ISMS Phase II verification is completed, the Contractor shall annually review ISMS performance and provide an annual ISMS Declaration report to DOE within 30 days following the end of each Government fiscal year. DOE may provide guidance for the content of this annual Declaration report (as received from DOE HQ). The

Contractor may establish a separate EMS Description document that is complementary to the ISMS Description to facilitate ISO14001 certification.

C.8.3.08 Safety Culture

The Contractor shall establish and maintain a strong safety culture as required by DOE's Nuclear Safety Policy (DOE P 420.1) and Integrated Safety Management Policy (DOE P 450.4A). The Contractor shall also implement effective employee concerns programs. DOE's Employee Concern Program (DOE O 442.1A) and Differing Professional Opinion Process (DOE O 442.2) encourage the free and open expression of employee concerns. The Contractor shall set the expectation that employees have not only the right to raise concerns, but also the responsibility to raise concerns, and that they can do so without fear of retaliation. The Contractor shall take action to proactively address, or demonstrate adequate and effective response to, chilling effect. The Contractor shall also demonstrate evidence of immediate, adequate and effective mitigation of substantiated allegations of harassment, intimidation, retaliation, and/or discrimination (for engagement in protected activity). The Contractor shall establish and maintain a strong safety culture and Safety Conscious Work Environment (SCWE), in accordance with Departmental expectations and the Integrated Safety Management System (Department of Energy Acquisition Regulation (DEAR) clause at 970.5223-1, *Integration of Environment, Safety, and Health into Work Planning and Execution*.), specifically focusing on the three Safety Focus Areas of Leadership, Employee Engagement, and Organizational Learning.

C.8.3.09 Emergency Management

The Contractor shall provide the necessary personnel, support, resources, facilities, and access in order to maintain an Emergency Management program that is integrated into a single site-wide program operated by the INL contractor, and coordinated with other DOE ID prime contractors as documented in contractors' Interface Agreements. The Contractor shall submit the Emergency Management Program for DOE approval at least 30 days prior to contract effective date. The Contractor shall ensure their Emergency Management Program, including any requirements for TMI-2 (PLN-1610), is in place by the contract effective date. The Emergency Management program shall be compliant with DOE O 151.1C, Comprehensive Emergency Management System, or its successor directives, and any other relevant directives, laws, etc. The Emergency Management program shall be adequate to analyze, plan, and respond to the hazards that are introduced, present, transported, or collocated with the facilities operated by the contractor. General requirements shall include the development and implementation of a Comprehensive Emergency Management System designed to:

- Minimize the consequences of all emergencies involving or affecting facilities and activities (including transportation operations/activities);
- Protect the health and safety of all workers and the public from hazards associated with site operations and those associated with decontamination, decommissioning, and environmental restoration;
- Prevent damage to the environment; and
- Promote effective and efficient integration of all applicable policies, recommendations, and requirements, including Federal interagency emergency plans.

In order to maintain a compliant program, the Contractor shall provide and maintain adequate facilities, personnel, and other resources necessary to maintain a compliant program and shall provide at least the following:

- Facilities that have the power, communications, monitoring, equipment, and furnishings for Emergency Control Centers (ECCs) at RWMC and INTEC and alternate ECC(s) for RWMC and INTEC. Office space for emergency planners or hazards assessors that may be permanently housed in or in close proximity to the ECC shall also be furnished.
- Personnel that can staff a 24/7 cadre of Emergency Response Organization (ERO) filling necessary command and control and support positions in the ECCs, On Scene, and in the Emergency Operations Center (EOC). This includes an Emergency Action Manager (EAM) for each major site facility (RWMC and INTEC), along with other positions in an approved emergency plan. In addition to responding to actual events, ERO personnel shall be trained, maintain qualifications, and conduct drills and exercises necessary to be proficient.
- Physical access to facilities and access to databases, personnel, or other information sources necessary for hazards assessors to conduct emergency planning hazards surveys and assessments. This shall include a notification process prior to introduction, removal, or relocation of hazardous material, or changes in processes that have the potential to change hazardous material release characteristics. Notification of issues or changes relating to the Unresolved Safety Question/Potential Inadequacy of Safety Analysis (USQ/PISA) process and documented safety basis is also required.
- A senior management personnel position with the authority to act in an advisory and coordination capacity in the EOC for emergencies or drills involving contractor facilities.
- A public affairs liaison position with the authority to coordinate on press releases, press conferences, or other emergency public information functions for emergencies or drills involving contractor facilities.
- Operations, technical, or labor personnel to provide mitigation of hazardous material releases or control of facility processes that will minimize releases. These personnel may also act in a support role with the INL site-wide fire department or other response personnel.
- A recovery manager and any other personnel necessary to form a recovery team and perform the recovery functions required under emergency management. The appointment of a recovery manager, and the facility turnover when an emergency is terminated will normally be the transition back to operations under contractor control.
- Resources necessary to perform corrective actions for issues identified in drills, exercises, operational emergencies, self-assessments, or external assessments (e.g. DOE-ID, DOE-HQ, HSS, IG, etc.).
- Time for all facility personnel to be trained in emergency response actions that are necessary for general employees (e.g., take shelter, evacuate, etc.), along with additional time for some facility personnel who will perform as area wardens for evacuation and personnel accountability purposes.

The Contractor shall prepare, submit for DOE approval, and execute the approved Continuity of Operations Plan per DOE Order 150.1A, Continuity Programs. The Contractor shall submit the Continuity of Operations Plan for DOE approval at least 30 days prior to contract effective date.

C.8.3.10 Radiological Assistance Program (RAP)

The Contractor shall support the National Nuclear Security Administration (NNSA) RAP with separate funding provided by DOE through the NNSA. Upon request by DOE, the Contractor shall provide Radiological Control Technicians, Radiological Control Supervisors and other support personnel as deemed necessary by DOE to support requests for assistance during radiological emergencies or other events/activities requiring radiological expertise. The Contractor agrees to allow personnel supporting RAP to be appropriately trained in accordance with DOE requirements, and further agrees to provide for the storage and security of any DOE supplied equipment. The Contractor shall supplement response activities with Project equipment and vehicles when needed, if available, and maintain/develop all required plans, procedures and reports.

C.8.3.11 Quality Assurance

The Contractor shall develop, implement, assess, and continuously improve the Quality Assurance Program (QAP) in accordance with DOE Order 414.1D, Admin Change 1, *Quality Assurance*, Attachment 2, *Contractor Requirements Document* (CRD); the EM QAP, EM-QA-001; associated DOE directives (i.e. Policies, Guides, Manuals, and Orders) and Section H.33, *Quality Assurance System.* The QAP shall be submitted to DOE for approval within 30 days of the NTP and DOE approval will be documented prior to the contract effective date.

The Contractor shall develop and implement a comprehensive Issues Management System for the identification, assignment of significance category, and processing of quality or safety-related issues identified within the Contractor's organization in accordance with DOE Order 414.1D, Admin Change 1, *Quality Assurance*, Attachment 2, *Contractor Requirements Document*; the EM *Quality Assurance Program*, EM-QA-001; associated DOE directives referenced herein (i.e. Policies, Guides, Manuals, and Orders) and Section H.33, Quality Assurance System.

C.8.3.12 Radiation Protection

Consistent with 10 CFR 835, Occupational Radiation Protection and the Departmental Implementing Guides, the Contractor shall conduct site activities in compliance with a DOE approved Radiation Protection Program (RPP) to control internal and external dose from occupational radiation exposure and minimize the spread of contamination. The As Low As Reasonably Achievable (ALARA) process shall be applied to EM program activities. The Contractor shall, at the NTP, adopt the existing RPP or submit a proposed RPP that must be approved by DOE prior to contract effective date. If adopting the existing RPP, a revision to the RPP shall be submitted to DOE within 180 days of contract effective date.

The Contractor shall purchase a Department of Energy Laboratory Accreditation Program (DOELAP) accredited external and internal dosimetry services from the INL contractor, see Exhibit C-2, *List of Mandatory and Optional Site Services*. All dosimetry records will be maintained in a single database by the INL contractor.

C.8.3.13 Nuclear Safety

The Contractor shall establish and maintain a Nuclear Safety Program in compliance with 10 CFR 830, Subpart B, and relevant directives, and consistent with relevant guides, and standards. The Contractor shall ensure that the structure of requirements to achieve nuclear safety is based on sound principles such as defense in depth, redundancy of protective measures, robust technical competence in operations and management oversight, and compliance with DOE Directives embodying nuclear safety requirements. The Contractor shall maintain authorization basis documents. The Contractor shall, at the NTP, adopt the existing Unreviewed Safety Question (USQ) process, or submit a proposed USQ process to DOE that must be approved prior to contract effective date. Any changes to the established Unreviewed Safety Question process shall require DOE approval. The Contractor shall ensure that all nuclear facilities are maintained and operated within the DOE approved safety bases. The Contractor shall comply with DOE requirements for nuclear facility start of operations and re-start of operations as required by DOE Order 425.1D, Verification of Readiness to Startup or Restart Nuclear Facilities.

C.8.3.14 Criticality Safety

The Contractor shall establish and maintain a Criticality Safety Program in compliance with 10 CFR 830.204(b)(6), and relevant directives, guides, and standards identified in this contract. The Contractor shall, at the NTP, adopt existing Criticality Safety Program (CSP) plans and procedures, or submit a proposed CSP to DOE that must be approved prior to contract effective date. Any changes made to the Criticality Safety Program require DOE approval.

C.8.3.15 Environmental Sustainability

The Contractor shall assist the DOE through direct participation and other support in achieving the DOE's sustainability goals as required by DOE Order 436.1, *Departmental Sustainability*; and the DOE Strategic Sustainability Performance Plan.

The Contractor shall consider, to the extent practical, Green and Sustainable Remediation (GSR) and Innovative Technology practices in all phases of this PWS and to implement such practices when they reduce costs, expedite project schedules, minimize risk, and maximize effectiveness.

The Contractor shall develop and implement internal policies to calculate and track greenhouse gas emissions following Federal guidelines and annually report a comprehensive inventory of absolute greenhouse gas emissions, including specific scope 3 (indirect) emissions, in accordance with DOE greenhouse gas reporting requirements. The Contractor shall implement the *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act* issued by the Environmental Protection Agency (EPA), see website: http://www.epa.gov/oaintrnt/documents/epa_swm_guidance.pdf.

The Contractor shall manage its vehicle fleet to reduce petroleum use, increase alternative fuel use, reduce fleet related greenhouse gas releases, and follow DOE fleet guidance as provided by the CO.

The Contractor shall assist the DOE in meeting the pollution prevention and waste diversion goals through source reduction and, as determined to be cost effective and consistent with DOE sustainability goals, through diversion from disposal of non-hazardous solid wastes and construction and demolition materials and debris.

The Contractor shall assist the DOE in meeting its high performance sustainable building design, construction, operation and management, maintenance, and deconstruction goals as follows:

- Pursue cost-effective, innovative strategies, such as highly reflective and vegetated roofs, to minimize consumption of energy, water, and materials and to contribute to efforts to bring facilities into compliance with the Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings (Guiding Principles).
- Manage existing building systems to reduce the consumption of energy, water, and materials, and identify alternatives to renovation that reduce existing assets' deferred maintenance costs in accordance with the Energy Independence and Security Act.
- Identify opportunities to consolidate and dispose of existing assets, optimize the performance of the DOE's real-property portfolio, and reduce associated environmental impacts.
- Assist the DOE in ensuring that current and new Federal buildings and Federal buildings undergoing major renovations reduce their fossil fuel-generated energy consumption (baseline 2003) by 65% (2015) and by 80% (2020).
- Ensure that new buildings or major renovations obtain Leadership in Energy & Environmental Design (LEED) Gold certification, unless a waiver is obtained through the DOE Acquisition Executive.
- Ensure that new building leases or renegotiation of existing leases incorporate sustainable practices that support the Guiding Principles.

The Contractor shall ensure major replacements of installed equipment, renovation or expansion of existing space, employ the most energy efficient designs, systems, equipment, and controls that are life-cycle cost effective (documented analyses shall be provided to DOE on request), and ensure such activities contribute to compliance with the Guiding Principles.

The Contractor shall designate a facility energy manager and complete building energy and water evaluations every four years for each facility according to the Energy Independence and Security Act, Section 432. The Contractor shall use Energy Star Portfolio Manager rating tool to record energy and water audits and sustainability performance information. The Contractor shall ensure that facility energy managers commission equipment and establish Operations and Maintenance (O&M) plans for measuring, verifying, and reporting energy and water savings.

The Contractor shall assist the DOE in advancing sustainable acquisition for products and services and shall:

- Incorporate electronics stewardship and best management practice;

- Establish and implement policies to enable power management, duplex printing, and other energy-efficient or environmentally preferable features on all eligible agency electronic products;
- Employ environmentally sound practices with respect to the agency's disposition of all agency excess or surplus electronic products;
- Implement best management practices for energy-efficient management of servers and Federal data centers;

The Contractor shall assist the DOE to achieve sustainable environmental management by:

- Maintaining an ISO 14001 EMS;
- Ensuring the EMS incorporates objectives and measurable targets that contribute to the achievement of the sustainability goals of the DOE strategic Sustainability Performance Plan;
- Developing or contributing to development of an annual INL Site Sustainability Plan; and
- Establishing and implementing activities to submit data and reports required to demonstrate DOE progress towards achieving sustainability goals.

C.8.3.16 Other

This scope also includes the following: Training Programs, Sample and Analysis Management (SAM) Core Services, Chemical Management Services, Hoisting and Rigging, Welding Qualification Program, Weld Test Lab, and Calibration Services.

C.8.4 General Facility Management

The Contractor shall provide office space for approximately 15 DOE personnel in CPP-663, and 10 DOE personnel in WMF-658. The Contractor shall also provide office space at INTEC for two NRC contractor personnel responsible for the NRC licensed facility. Office space shall include areas for information technologies, communications, administrative functions (e.g., records storage, conference room, office supply storage) and access to storage for, and use of, classified materials.

The Contractor shall provide services that include, but are not limited to: locksmith services, bus service, cafeteria operations, fleet operations and maintenance within RWMC and INTEC (with the exception of general facility maintenance and custodial services as described in C.3.1.01 and C.3.2.01), custodial services and non-radioactive solid waste disposal, daily mail, space planning and utilization, and moving of furniture and equipment for all EM facilities within this PWS. This scope also includes materials and services for maintaining print shop capability, copiers, and graphics.

The Contractor shall assume responsibility for the Technical Support Buildings (TSB) and Technical Support Annex (TSA) lease and property taxes located in Idaho Falls (Foote Road), with the exception of janitorial services provided via a separate DOE prime contract. The Contractor shall provide office space for the DOE Inspector General and current INL contractor at TSB-TSA.

C.8.5 DOE-ID Support Activities

The Contractor shall provide support services to DOE which include, but are not limited to: IT developer support, wireless service, records management, copier services, printing/graphics, DOE office moves, and DOE training. These support services for DOE personnel are in addition to the Information Management activities and Office Space and Custodial Services that the Contractor shall perform per C.8.1 and C.8.4.

C.8.6 Defined Benefit Pension Plan Costs (CLIN 00005)

Per Section B.7, the Contractor shall use designated Defined Benefit Pension Plan funding to reimburse the INL contractor for the ICP Core share of the current Defined Benefit Pension Plan for incumbent (grandfathered) employees and retirees.

The Contractor as a sponsor of the Idaho National Laboratory Employee Retirement Plan (INLERP) will be reimbursed under CLIN 00005 for pension contributions in the amounts necessary to ensure that the plan is funded to meet the annual minimum requirement under ERISA, as amended by the Pension Protection Act (PPA) of 2006 or as otherwise directed by the Department of Energy. However, reimbursement for pension contributions above the annual minimum contribution required under ERISA, as amended by the PPA, shall require prior approval of the Contracting Officer and will be considered on a case by case basis. Reimbursement amounts will take into consideration all pre-funding balances and funding standard carryover balances.

C.9.0 DELIVERABLES

See Section J, Attachment J-2, List of Contract Deliverables/Submittals. All deliverables provided under this Contract, including implementing policies, plans, and procedures, shall be the property of the Government for present and future use without any proprietary data limitations.

C.10.0 LIST OF EXHIBITS

Exhibit No.	PWS Section	Title
C-1	**C.2.0 C.8.3.03**	**List of Current Environmental Permits Applicable to EM INL Site Work Scope**
C-2	**C.2.0 C.8.2.06 C.8.3.12**	**List of Mandatory and Optional Site Services (Amendment No. 2)**
C-3	**C.3.0 C.3.1 C.3.2.01**	**List of ICP Core EM Buildings and Structures**
C-4	**C.3.1 C.3.2.01**	**ICP Core Utility Systems for INTEC and RWMC (Amendment No. 2)**
C-5	**C.3.2.02 C.3.2.03**	**List of INTEC Infrastructure Upgrades Projects**

	C.3.2.04	
C-6	**C.4.0** **C.5.2** **C.8.3.02**	**Environmental Regulatory Structure and Interface Protocol for the ICP Core Contractor**
C-7	**C.5.0**	**ISA Inventory of CH-TRU Waste (IDC Definitions)**
C-8	**C.5.0** **C.5.1**	**ISA Inventory of CH-TRU Waste**
C-9	**C.5.0** **C.5.3**	**ISA and Non-ISA Inventory of RH-TRU Waste (Lot 1-9) (Amendment No. 2)**
C-10	**C.5.4**	**NNPP Pieces, Parts, and Fines (PPF) Inventory (Lot 10)**
C-11	**C.5.3.06** **C.5.3.07**	**Lot 11 - Legacy RH-M/LLW**
C-12	**C.5.3.06** **C.5.3.08**	**Lot 12 - Newly Generated RH TRU and MTRU Waste**
C-13	**C.5.0**	**Standard Waste Container Volume Assumptions**
C-14	**C.5.1.03**	**CH-TRU Waste Inventory To Be Retrieved**
C-15	**C.5.5.03** **C.5.5.04**	**Inventory of Legacy Excess Radioactive/Hazardous Materials**
C-16	**C.5.5.03**	**Inventory of Sodium Component Maintenance Shop (SCMS) Backlog**
C-17	**C.5.7**	**CH-TRU Storage Facility Technical and Functional Requirements**
C-18	**C.7.1.01** **C.7.1.03**	**Spent Nuclear Fuel Inventory and Plot Plans for CPP-603, CPP-749, and CPP-2707 (OUO)**
C-19	**C.7.1.01** **C.7.1.03**	**EBR-II Spent Nuclear Fuel Description Document (OUO)**
C-20	**C.7.1.01**	**INTEC Spent Nuclear Fuel Description Document (OUO)**
C-21	**C.7.1.02**	**FRR/DRR Spent Nuclear Fuel Potential Sources**
C-22	**C.7.2**	**Listing of NRC Documents Applicable to ICP Core**
C-23	**C.7.3**	**Memoranda of Agreement (MOA) for Naval Spent Nuclear Fuel Transfers and Disposition (OUO)**
C-24	**C.8.2.04**	**Government Furnished Equipment**
C-25	**C.8.2.02**	**INL Site Security Plan (OUO)**
C-26	**C.5.5.01**	**U-233 Waste Located In Storage at INTEC**