STATEMENT OF WORK
FOR
CONSTRUCTION

Requisition #: 329366

Title: 100K Waste Sites Remediation

Revision Number: 1

Date: 07/30/19
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PART 1 – GENERAL

1.1 INTRODUCTION / BACKGROUND

CH2M HILL Plateau Remediation Company, LLC (Buyer), as a prime contractor to the U.S. Department of Energy (DOE), requires field remediation of waste sites located within the Hanford Site’s 100K Area. These are waste sites related to nuclear reactor operations and fuel production comprising of buried pipelines and areas contaminated by operational leaks and potential spills.

1.2 DESCRIPTION OF WORK - GENERAL

1.2.1 Work is located in the 100K Area of the Hanford Site and is located approximately 40 road miles north of Richland, Washington.

1.2.2 Work consists of remediation of multiple waste sites as described herein. Additional work sites may be added at the Buyer’s discretion. Contractor shall remove, treat, and dispose of radiological and chemical hazards that includes excavation of contaminated soils, rebar reinforced concrete, and various sizes and material type of piping which will be retrieved, size reduced, and loaded into roll-on/roll-off containers. Non-contaminated overburden shall be removed and stockpiled for future backfill material.

1.2.3 Contractor shall provide a trailer for offices, lunchroom, and pre-job meetings, and a bathroom trailer at the worksite. Power is in place and provided by Buyer. The Container Transfer Area (CTA), Survey Tent (175KE) and the container tarping platform shall be provided by Buyer.

1.2.4 The contractor is responsible for providing a drive on truck scale and connection to existing power, maintain haul roads, and repair and maintenance of Buyer provided tarping/survey tent.

1.2.5 The work area currently exists within a radiological controlled area (reactor site area). The majority of the waste sites are currently posted as underground radioactive material areas (URMA). Some sites are posted as a Soil Contamination Area (SCA) and some are posted as Contamination Area (CA).
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SUMMARY OF WORK

1.3 DESCRIPTION OF WORK - SPECIFIC

Included Work: The following identifies major work elements only. The work is considered a “remove, treat, and dispose” activity that includes multiple radiological and/or chemical contaminated sites. The sites listed in Section 1.4 collectively contain approximately 43,900 U.S. tons of contaminated material that shall be removed and placed in Buyer-provided roll-on/roll-off containers. The containers will be staged in the 100K CTA for pickup and transportation by Buyer to ERDF. In addition to contaminated soil there is approximately 1,675 linear feet of < 24 inch diameter pipe, 3,516 linear feet of > 24” diameter pipe and 2,205 tons of rebar reinforced concrete. Approximately 122,400 cubic meters of non-contaminated, overburden shall be removed, stockpiled and sampled for potential use as backfill material.

1.3.1 The Contractor shall provide and manage labor, equipment, material, and services required to complete work. Labor includes participation of Contractor’s employees in training and medical examinations required by Contract. Contractor shall provide Plan of the Day/Office Trailer; bathroom trailer and/or portable toilets with associated janitorial/maintenance services for men and women on the job site. Contractor shall provide all site preparatory and compliance material such as, drive on load scales, signs/postings, rope, container liners, container socks, fence posts, and soil fixative.

1.3.2 The Contractor shall furnish and assume full responsibility for materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, sanitary facilities, temporary structures, and other facilities and incidentals necessary for the performance of the work.

1.3.3 The right to inspect and test materials to verify conformance with the specification requirements shall be reserved by the Buyer. If requested, material samples shall be furnished to the Buyer at no additional cost. Materials not in conformance with the specification requirements shall be removed from the site and replaced at no additional expense to the Buyer.

1.3.4 The Contractor shall provide Civil Surveys of the excavation and overburden stockpiles throughout the duration of the project.

1.3.5 Before receiving Notice to Proceed for excavation, the Contractor shall participate in a readiness assessment/review to demonstrate to Buyer that all required documentation is in place and that its personnel, procedures, submittal and equipment are ready to commence work. Buyer will review all documents and discuss readiness with Contractors key personnel prior to issuing a Notice to Proceed.

1.3.6 The Contractor shall identify scheduled work activities that would require radiological control technician (RCT) involvement. The Contractor should anticipate rotations of RCT personnel at the site associated with a bargaining agreement.
Excluded Work:
This Scope of Work does not include the following:

- Decommissioning of monitoring wells.
- Cultural/ecological assessments or reviews
- Mobilization of office trailers
- Providing water supply source for dust control
- Radiological control support/personnel monitoring
- Radiological detectors/instrumentation
- Respirators for work performed within a radiological area that may require protection based on the potential for airborne radioactive contamination
- Backfill
- Revegetation
- Supplying ERDF bulk waste containers, tarps, and tie downs
- Supplying radiological postings (signs and labels)
- Supplying specialty containers, packaging, and drums
- Transporting ERDF containers from the CTA to ERDF

1.4 WASTE SITE REMEDIATION DESCRIPTIONS

1.4.1 100-K-55:2/100-K-56:3/100-K-96: These waste sites have been combined to allow for removal of the existing steel pipelines, concrete sewer drain, and concrete structures including manhole access locations, pipe anchors and portions of the drop inlet structure. Remove approximately 190 linear feet of 16” diameter steel pipe, 440 linear feet of 42” diameter steel pipe, 285 linear feet of 66” diameter steel pipe and 350 linear feet of 72” diameter steel pipe. Included would be the removal of 165 linear feet of asbestos concrete duct bank, 220 linear feet of concrete reinforced sewer, inside dimensions 1.68 meters by 1.68 meters (66 inches by 66 inches), 36 linear feet of reinforced concrete manhole access structures, four reinforced concrete pipe anchor structures, and 17 linear feet of the drop inlet structure below grade.

1.4.2 100-K-60 (Segment): The segment of the piping being removed runs southwest from the excavation limits of the previous remediation of 100-K-47:1 approximately 425 linear feet. Concrete reinforced sewer, inside dimensions 1.68 meters by 1.68 meters (66 inches by 66 inches), Included would be the removal of 400 linear feet of railroad track and ties.

1.4.3 100-K-79:7 (Segment): This site is being remediated to remove approximately 1,430 linear feet of 24” diameter steel pipe, 230 linear feet of 36” diameter steel pipe and 570 linear feet of steel pipelines, 4” to 8” diameter. Included would be the removal of a concrete pipe anchor.
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1.4.4 **100-K-79:8 (Segment):** This site is being remediated to remove approximately 781 linear feet of 48” diameter steel pipe. Included would be the removal of a concrete pipe anchor and 144 linear feet of railroad track and ties.

1.4.5 **100-K-47:2:** The waste site overburden is currently being removed under the existing FY2019 scope. The remaining contaminated soil and the steel piping shall be removed under this new scope.

1.4.6 100K Waste Site Summary

Summary of information on the contaminants of potential concern and the remediation strategy of each waste site are listed in Table 1. Additional information taken from the Hanford Site Waste Information Data System (WIDS).

<table>
<thead>
<tr>
<th>Description</th>
<th>Contaminants of Potential Concern</th>
<th>Remediation Strategy</th>
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<tr>
<td>100-K-55:2, 100-K-56:3 and 100-K-96</td>
<td>Aluminum Sulfate, Calcium Oxide, Chlorine, Diatomaceous, Sodium Dichromate, Hexavalent Chromium, Radionuclides</td>
<td>Standard remediation practices to include removal of overburden and stockpile per scope. Size reduce reinforced concrete box sewer, reinforced concrete pipe anchors, reinforced concrete manhole structures, Steel piping, asbestos concrete duct bank, and excavate contaminated soils for loading into ERDF containers</td>
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<tr>
<td>100-K-60 Process Sewer</td>
<td>Aluminum Sulfate, Calcium Oxide, Chlorine, Sulfuric Acid, Sodium Hydroxide, Hexavalent Chromium, Radionuclides</td>
<td>Standard remediation practices to include removal of overburden and stockpile per scope. Size reduce reinforced concrete box sewer, structural materials and excavate contaminated soils for loading into ERDF containers</td>
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<tr>
<td>100-K-79:7</td>
<td>Sodium Dichromate, Sulfuric Acid, Hexavalent Chromium, Mercury</td>
<td>Standard remediation practices to remove and size reduce Steel pipelines and structural materials and excavate contaminated soils for loading into ERDF containers</td>
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<tr>
<td>100-K-79:8</td>
<td>Sodium Dichromate, Sulfuric Acid, Hexavalent Chromium, Mercury</td>
<td>Standard remediation practices to remove and size reduce Steel pipelines and structural materials and excavate contaminated soils for loading into ERDF containers</td>
</tr>
<tr>
<td>100-K-47:2</td>
<td>Aluminum Sulfate, Calcium Oxide, Chlorine, Sulfuric Acid, Sodium Hydroxide, Hexavalent Chromium, Radionuclides</td>
<td>Standard remediation practices to excavate contaminated soils for loading into ERDF containers.</td>
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1.5 DRAWINGS AND EXHIBITS

1.5.1 Drawings

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<td>100K-WIDS-SK-019</td>
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<td>100K-WIDS-SK-020</td>
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<td>100K-WIDS-SK-036</td>
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1.5.2 Exhibits

<table>
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1.6 WORK ACTIVITIES

1.6.1 MOBILIZATION

1.6.1.1 Project Readiness Review

Prior to receiving Notice to Proceed (NTP) for excavation activities, the Contractor shall prepare and participate in a project readiness assessment/review to demonstrate to Buyer that all required documentation is in place and that its personnel, procedures, submittals and equipment are ready to commence work.

Contractor shall comply with all relevant and appropriate, DOE-RL, Hanford, and Buyer site requirements during execution of this work scope.

The Buyer will review all Contractor submittal documents per Section 01300A, Master Submittal Register and discuss readiness with Contractors key personnel prior to issuing the NTP.

The Contractor shall prepare the following documents for the Buyers review and approval:

- Earthwork and Excavation Materials Handling Plan
- Medical Qualifications
- Key Personnel Resumes
- Chemical Management Plan
- Employee Training Records
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- Health and Safety Plan
- JHA/JSA
- Cold Weather Protection Plan
- Equipment Inspection and Maintenance Records
- Preventative Maintenance Program
- Stabilization/Treatment Plan for Contaminated Soils
- Air Quality Data Summary Record
- Traffic/Access Control Plan
- Spill Prevention Control and Countermeasure Plan [SPCC]
- Asbestos Handling Plan
- OJE/OJT for Operators

1.6.2 Existing Haul Roads and Access

Contractor shall walk down existing site haul roads to determine if the roads meet the requirements of the Contract Documents. Site needs to be controlled to prevent unauthorized access to Contractor facility trailers, waste sites within this scope, and the CTA. This shall include, as needed, the appropriate use of Contractor furnished signage, additional task lighting, fencing, traffic cones, or other materials and items.

1.6.3 Survey Monuments

Contractor shall field verify, survey, and establish or reestablish temporary survey monuments per Exhibit A, Civil Survey Requirements.

1.6.4 Existing Site Configuration

The Contractor shall ensure that existing site configurations and interferences are planned for under the given work scope. Active utilities (e.g., sewer, electric services pump and treat utilities) may be in the vicinity of waste sites. Review Hanford Site drawings to verify known site utility locations. Field identify and mark on field controlled drawings any interferences based on proposed Contractor means and methods, and if necessary, propose and receive approval of design modifications from the Buyer and site utility services steward or landlord, prior to commencement of the work. Proposed utility modifications shall be submitted to the Buyer for evaluation and acceptance prior to the modification being made.
1.6.5 Tools, Material, Supplies, Facilities

Contractor shall deliver and setup equipment, tools, materials, supplies, facilities, and provide sufficient work force required to perform the work. Contractor shall maintain equipment and facilities throughout duration of the work to include an approved inspection and preventative maintenance program and general housekeeping. Before delivery, provide the Buyer with a listing of equipment that will be used during remediation activities, a description of how such equipment will be used, and a description of any constraints or limitations associated with the equipment. In addition, prior to mobilization, submit certification that equipment delivered to the site is Occupational Safety and Health Administration (OSHA) compliant, uncontaminated, and have been inspected and meets the requirements of the Contract Documents. Contractor shall submit Equipment Maintenance and Inspection Records to Buyer prior to delivery of equipment to site.

1.6.6 Vehicles and Equipment

Excavation and materials handling equipment shall meet safe operating requirements prescribed by OSHA and the manufacturer. Vehicles shall conform to applicable Federal and Washington State laws, including 46 Revised Code of Washington (RCW), 49 CFR 393, and U.S. Department of Transportation regulations, as a minimum.

Fire extinguishers shall be required in vehicles and equipment supporting excavation work. Reflector kits shall be required in commercial motor vehicles. First-aid kits are recommended in vehicles. Back-up alarms shall be required when view to the rear can be obstructed.

Contractor equipment that is used for remediation activities shall comply with 29CFR 1926.1153 Table 1, to ensure the operator cabs are compliant during concrete demolition or other activities with potential silica exposure.

Prior to equipment mobilization, provide a letter of compliance stating that the equipment has been inspected and meets the requirements per the Contract Documents.

Equipment brought to the site shall be maintained and operated as intended by the manufacturer; shall be in good working condition; and shall be free of residual dirt, oil, or grease. Cracked or broken glass shall be replaced. Equipment equipped with a windshield shall be operated with the windshield in place and closed. Additional protection must be added when it is anticipated that the equipment’s standard protection (e.g., safety glass) is insufficient to protect the operator from injury. Demolition screens must be used at all times. Safety handrails shall encompass the entire area of equipment that personnel may enter that is over 4 feet high. No modifications or additions that affect the capacity or safe operation of the equipment shall be made without the manufacturer’s written approval. If such modifications or changes are made, the capacity, operation, and maintenance instruction plates, tags, or decals shall be changed accordingly.
Motor vehicles and heavy equipment shall be inspected (including functional checks) at the beginning of each shift to ensure that the equipment is in safe operating condition and free of damage or wear and tear that could cause failure while in use. The inspections shall be documented prior to using the equipment. The Contractor shall maintain an orderly file of equipment maintenance, inspection, and repair records available for Buyer review for the duration of the Contract.

The Contractor shall correct safety deficiencies immediately throughout the duration of project. The Buyer reserves the right to inspect and test the equipment and its setup for safe operation at any time.

1.6.7 Permits

Contractor shall obtain all required permits prior to commencement of work per requirements of the contract documents. Contractor shall also obtain permits identified as Buyer-provided permits, and have them available on-site at all times. This includes permit renewals, as required.

1.6.8 Contractor Facilities

The Contractor shall obtain new lease on existing field office trailer (MO1126) and restroom facility (MO2319) per the contract documents. Field office trailer shall be used for Contractor staff meetings, plan of the day meetings, worker breaks and lunch area. Key project staffing shall occupy smaller offices as required to manage their operations.

1.6.9 Training and Medical

The Contractor shall provide proof of required training and maintain an updated list of required training (e.g., Hanford General Employee Training [HGET], Hazardous Waste Operations and Emergency Response training [HAZWOPER], radiological worker, sample technician, asbestos worker, asbestos supervisor, etc.) for Contractor personnel per requirements in the Medical Qualifications and Training Records prior to commencement of work.

1.6.10 Roads and Traffic Signage

Contractor shall submit and maintain a Traffic Access Control Plan showing traffic patterns for Contractor container trucks and haul trucks. Traffic Route Plan shall include Buyer’s ERDF container truck traffic entering and existing the 100K site. Contractor shall furnish and establish appropriate temporary traffic signs to warn motorists of transport container truck traffic entering or leaving the existing access road entrance(s) to and from the 100K CTA.
1.6.11 Fencing

The Contractor shall furnish the materials to relocate (as necessary) and maintain a perimeter fence around waste sites with existing fences prior to intrusive work. The fence material shall be as specified in the Contractor supplied *Earthwork and Excavated Materials Handling Plan*. The Contractor shall maintain job site fencing to be free of vegetation, tumbleweeds, or trash accumulation.

1.6.12 Survey Facility

Contractor shall utilize the Buyer supplied existing survey tent (175KE), container tarping platforms and decontamination station.

1.6.13 Chemical Storage Area

Contractor shall provide a chemical storage area with appropriate cabinets, containment, posting, etc. per the Contractor provided *Chemical Management Plan*.

1.7 OPERATIONS AND OVERHEAD

1.7.1 Contractor Schedule

Contractor shall maintain a master resource loaded schedule throughout the project as directed by the Buyer.

1.7.2 Meetings

Contractor key personnel shall attend various meetings as required to perform the work. Weekly status meetings for each task release shall be required. At the weekly status meeting contractor shall provide a 4-week, resource loaded, look-ahead schedule per release. Meetings with Buyer, daily pre-job meetings, and meetings with Buyer’s client (DOE, EPA, etc.) to be attended as required.

1.7.3 General Home Office Support

Contractor shall provide general home office support as required to meet the requirements of the project. These support services shall include, but not limited to the generation, support and consultation of plans, calculations, reports, submittals, transmittals, site visits, work package developments, schedule preparations, change order management.

1.7.4 Management and Supervisory Personnel

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Contractor shall provide the following professional and support personnel required to perform the work scope per the contract documents. These positions shall include, but not limited to; Project Managers, Engineers, Supervisors, Quality Assurance Officers, Site Safety Officers, Superintendents, Construction Managers, Foreman’s, General Forman’s, Training, Schedulers, Assistants, and Competent Persons.

1.7.5 Office Services and Supplies

Contractor shall provide incidental services as required to meet the requirements of the project. These services shall cover all incidental job burdens and supplies including, but not limited to; pens, pencils, markers, paper, copiers, copier supplies, scanners, reproduction services, mail services and other office support not included in the G&A rate.

1.7.6 Contractor Walk downs and Daily Monitoring

Contractor shall perform jobsite walk downs and daily monitoring for planning and preparation of Job Hazards Analyses (JHA’s), participation in Buyer preparation of work packages and ensure that the site is configured to accommodate potential interferences and hazards within the given work scope. Contractor shall anticipate that Buyer will participate in such walk downs and planning activities. Contractor shall ensure that a minimum of one member per craft, a supervisor, health and safety representative and industrial hygiene representative shall participate in all job hazard analysis and work package development.

1.7.7 Emergency Drills

Contractor shall participate in all drills (i.e., take cover and fire drills) including self-assessments of the drills (to be completed as required throughout the duration of the project per the direction of the Buyer.

1.7.8 Inspections

Contractor shall perform inspections on the excavation equipment, materials handling equipment, vehicles, and other general periodic inspections as required throughout the duration of the project per the contract documents.

1.7.9 Radiological Work Planning

Contractor shall identify scheduled work activities that would require radiological control technician (RCT) involvement and support. The Contractor should anticipate rotations of RCT personnel at the site associated with a bargaining agreement and scheduled training.

1.7.10 Container Transfer Area (CTA) Access and Off-Hour Access
Contractor shall maintain access control for the CTA as necessary to prevent unauthorized access. This shall include, as needed, the appropriate use of Contractor furnished signage, fencing, traffic cones, or other materials and items. Contractor shall maintain the CTA as required (e.g., dust control) for ERDF use during off-hours (e.g., picking up ERDF containers during swing shift).

1.7.11 Container Transfer Area (CTA) Restroom

Contractor shall maintain portable toilet(s) in the CTA during all times when containers are present in the CTA.

1.7.12 Chemical and Radiological Planning

Contractor shall plan for constraints inherent to working in a hazardous chemical and/or radiological environment when planning and executing work. The SUBCONTRACTOR shall anticipate and be prepared to perform work operations using different levels of personal protective equipment (PPE) (D, C, and B as defined by OSHA and site specific requirements). PPE shall be provided in a variety of sizes that include the “big and tall” range (e.g., 2XL, 3XL).

1.7.13 Demarcation Materials

Contractor shall maintain supply material, equipment (for example, radiological rope or chains, yellow rope, T-posts, signage), and personnel required for the demarcation and maintenance of construction, radiological and safety control areas. The Buyer will provide radiological postings (signs and labels) for Contractor installation. The Buyer will provide direction for placement of radiological postings. Radiological and hazardous waste site postings shall be changed as conditions warrant.

1.7.14 Radiological Work Areas

Contractor shall maintain radiological work areas in accordance with the Buyers Radiological Control Program. Equipment and personnel will be subject to radiological survey (and possible decontamination) when exiting from a radiological area. The extent of the survey and decontamination will be determined by the Buyer, based on the Contractor’s means and methods for performing the work. Radiological controlled areas and materials will not be down-posted until approved by the Buyer.

1.7.15 Site Access

Contractor shall maintain strict access control to the job site throughout the duration of this contract to prevent unauthorized or inadvertent access to the job site, work areas, and radiologically posted areas. The Contractor shall maintain signs and other access control
postings, barriers, and equipment in accordance with Contract Documents. The Contractor shall install additional signs and barriers as directed by the Buyer.

1.7.16 Access to Other Work Zones

Contractor shall maintain clear access to groundwater wells, air monitors, etc., and shall accommodate periodic access to these and other points by others. The Buyer will communicate to the Contractor when and where others need access to the site. The Contractor shall challenge anyone accessing the site without prior authorization and shall immediately notify the Buyer of unauthorized access.

1.7.17 Water Fill Station

Buyer provides the water fill station throughout the duration of the project for Contractor usage.

1.7.18 Maintain Facilities

Contractor shall maintain their trailer facilities throughout duration of the work to include an approved inspection and preventative maintenance program and general housekeeping.

1.7.19 Drinking Water/Wash Water

Contractor shall maintain drinking and wash water facilities including (table, cups, dispenser, liquid soap and dispenser, towels, and trash receptacles) for site workers.

1.7.20 Trash Receptacles

Contractor shall maintain trash receptacles/dumpsters.

1.7.21 Two Way Radios

Contractor shall maintain two-way radio system through the duration of the project. Radios shall be available for the usage by the Buyer personnel assigned to oversee the Contractor field activities.

1.7.22 100K Facility Air Monitors

A minimum of four environmental 100K facility air monitors are in place and operated by the Buyer. The air monitors are currently powered by the 100K facility.

These 100K monitors shall be in operation during normal work operations (e.g., excavating and loading radioactive contaminated material). Contractor shall inspect all air monitors daily, prior to beginning normal work operations as identified by the Buyer, to verify operational status.
This information shall be recorded on the Monthly Air Quality Data Summary Record (MAQDSR) and submitted to the Buyer monthly. Interruption of operation shall be recorded on the MAQDSR and immediately reported to the Buyer. If any air monitor is out of operation for more than 48 hours, notify the Buyer, who will make the appropriate notifications to the regulatory agencies. Maintenance and repair of the air monitors will be by others. If all downwind air monitors are out of operation during normal work operations, excavation and loading activities shall be suspended until operation of at least one downwind air monitor is restored or backup equipment is deployed. Normal work operations are not allowed if no downwind monitors are operating. The Contractor can obtain a copy of the regulatory approved Air Monitoring Plan from the Buyer.

1.7.23 Cold Weather Plan

Contractor shall provide to the Buyer for approval by October 1 of each year a cold weather protection plan that describes the methods the Contractor will use to ensure buildings, utilities, facilities, materials and equipment are not negatively impacted by the freezing temperatures. In addition, the plan shall include how the Contractor will maintain personnel safe winter conditions for walking surfaces, proper footwear, and cold weather PPE requirements.

1.7.24 Spill Kits

The Contractor shall furnish and maintain spill kits at the CTA while in use, fueling stations, oil/lubricant stations, and maintenance work areas. Due to the nature of remedial action work, it is imperative to have a readied and mobile spill kit to respond where needed on the project (e.g., waste site, haul road). The spill kits shall contain appropriate material (scoops, shovels, and absorbent materials) for absorbing a liquid spill of at least 38 L (10 gal). The kit shall be marked “SPILL KIT” and contained to protect the kit contents from the elements (i.e., rain, snow, wind, etc.). Kit contents must be replaced within 24 hours after use. Enough absorbent must be on site to handle a liquid spill of 380 L (100 gal).

1.7.25 Fire Extinguishers

Contractor shall provide portable fire extinguishers per requirements of NFPA 10. Fire extinguishers shall be maintained within the CTA, near any equipment maintenance areas, in buildings/mobile offices, at the waste site during work activities, and within vehicles that require extinguishers.

1.7.26 PPE Storage

Contractor shall furnish and be responsible for storing new and laundered PPE in a PPE storage facility. The Contractor shall also prepare soiled non-disposable PPE for laundry pickup throughout the duration of the project.

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1.7.27 Hazardous Storage, Disposal and Handling

Wastes and hazardous substances shall be stored, handled, and disposed of in accordance with applicable State and Federal regulations, Hanford Site practices, and relevant and appropriate requirements specified in the applicable CERCLA Record of Decisions. The Contractor shall maintain an accurate inventory of chemicals and the applicable material safety data sheets (MSDS) and/or safety data sheets (SDSs) at the job site and provide a list and quantity of chemicals to the Buyer upon request and in accordance with the Contract documents.

1.7.28 Container Liquid Absorbers

The liquid absorbing sock shall be at least 203 mm (8 in.) in width and 1,829 mm (6 ft.) in length with a non-hazardous sodium- or potassium- polyacrylate absorbent sewn into the cells of the sock, such as "Water Works SP 400", or equivalent. The sock shall be capable of absorbing 30 liters (8 gallons) of water.

1.7.29 Delays

Anticipate delays and shutdowns due to environmental conditions and conditions consistent with the nature of performing work in a radiological and hazardous environment throughout duration of work (for example, dust-generating winds, atmospheric conditions that would create elevated levels of naturally occurring radionuclides like radon [which masks field instrument ability to detect radioactivity], and extreme weather). Anticipate delays associated with other Buyer activities, to include a backup plan for mobilizing to secondary site(s) during such delays.

1.8 MAINTENANCE

Contractor shall provide the following maintenance activities as required on a routine basis. These activities are intended to be performed by designated Contractor’s labor work force, not included in the operations and overhead activities, when remediation activities are not being performed. These activities will maintain the work operations including, but not limited to, housekeeping, combustible materials, chemical storage, drinking water, trash receptacles, site drills, meetings, roads, CTA, equipment maintenance, equipment inspections, refueling vehicles and equipment, general inspections, badging, medical monitoring, walk downs, barricading, boundary delineations and signage

1.8.1 Housekeeping

Contractor shall perform housekeeping for support facilities as required to keep the site free of miscellaneous litter, trash, and debris. Contractor is responsible for housekeeping activities (e.g., water, trash, janitorial) for support facilities. The Contractor shall conduct routine, daily cleaning required to keep Contractor-controlled/operated or occupied support facilities, site grounds, roads, and waste site free of trash, litter, food, and tumbleweeds.
1.8.2 Combustible Materials

Contractor shall keep the job site areas free of accumulation of combustible materials (e.g., used oil, wooden pallets, rags, etc.) including vegetation around facilities, windblown vegetation and windblown trash.

1.8.3 Chemical Storage Area

Contractor shall maintain the chemical storage area and ensure it is clean and controlled.

1.8.4 Drinking Water/Wash Water

Contractor shall maintain drinking and wash water facilities (table, cups, dispenser, liquid soap, dispenser, towels, and trash receptacles) for site workers.

1.8.5 Trash Receptacles

Contractor shall maintain trash receptacles/dumpsters on a regular schedule during project operations.

1.8.6 Site Drills

Contractor personnel shall participate in all drills (i.e., take cover, fire drills) including self-assessments of the drills as required throughout the duration of the project per the direction of the Buyer.

1.8.7 Meetings

Contractor personnel shall participate in meetings to include, pre-jobs, project reviews, project safety meetings as required throughout the duration of the project per the direction of the Buyer.

1.8.8 Road Maintenance

Contractor personnel shall maintain haul roads including grading, dust suppression, fixative applications and winter snow removal as required throughout the duration of the project per the direction of the Buyer.

1.8.9 Container Transfer Area (CTA) Surface Maintenance

Contractor personnel shall maintain the existing CTA surfacing including grading, dust suppression, fixative applications, and winter snow removal for the duration of the project.
1.8.10 Equipment

Contractor personnel shall provide general maintenance on the excavation equipment, materials handling equipment and vehicles as required throughout the duration of the project per the contract documents.

1.8.11 Refueling

Contractor personnel shall provide refueling of excavation equipment, materials handling equipment and vehicles as required throughout the duration of the project per the contract documents.

1.8.12 Inspections

Contractor personnel shall provide inspections on the excavation equipment, materials handling equipment, vehicles, and other general inspections as required throughout the duration of the project per the contract documents.

1.8.13 Badging

Contractor personnel shall maintain current site badging credentials at all times. Any lost badging or new badging shall be obtained as required throughout the duration of site access per the contract documents.

1.8.14 Medical Monitoring

Contractor personnel shall maintain current site medical monitoring at all times as required throughout the duration of site access per the contract documents.

1.8.15 Site Walk-Downs

Contractor personnel shall participate in site walk-downs as required throughout the duration of the project per the contract documents.

1.8.16 Demarcation /Barricades

Contractor personnel shall maintain demarcation, construction, radiological and safety control demarcation and barricades as required throughout the duration of the project per the contract documents.
1.8.17 Civil Survey Support

Contractor personnel may provide field escort support to the Civil Survey subcontractor as required throughout the duration of the project per the contract documents.

1.8.18 Signage

Contractor personnel shall maintain project signs in a clean and like-new condition as required throughout the duration of the project per the contract documents.

1.9 REMEDIATION

1.9.1 PRE-EXCAVATION ACTIVITIES

Pre-excavation activities shall be required prior to physical remediation of the waste site. These activities shall include but not limited to:

- Construction of haul roads and establishing the operation process of the CTA. This shall include, as needed, the appropriate use of Contractor-furnished signage, lighting, fencing, traffic cones, or other materials and items.
- Perform Pre-Excavation Civil Surveys for remediated waste sites in accordance with Exhibit A, Civil Surveying Requirements.
- Field identify interferences and establish plan for maintenance and protection of active interferences.

1.9.2 EXCAVATION AND MATERIAL HANDLING

Each waste site shall be excavated in compliance with the Contactor provided Earthwork and Excavation Materials Handling Plan, unless otherwise directed by Buyer. The full nature and extent of materials to be encountered during excavation and material handling is unknown. Soil and debris, of any nature, unearthed within the physical limits of the excavations shall be removed and managed at no additional cost to the Buyer. Excavated and handled materials may include, but are not limited to uncontaminated overburden soils, contaminated soil, piping, metal debris, concrete and asbestos piping and materials. A range of chemical and/or radiological contamination is expected.

The Contractor’s approach to excavation of the waste sites shall be coordinated in advance with the Buyer. Design dimensions shown on the Project Drawings based on review of historical information, process knowledge and engineering judgement. Actual excavation dimensions based on conditions observed in the field, radiological screening, and verification sampling. The Contractor shall excavate waste sites to the neat lines and grades shown on the Project Drawings for processing the uncontaminated overburden for on-site stockpiling and processing the contaminated soil and debris for disposal to ERDF in Buyer provide roll off/roll on containers.
Excavations shall be performed in accordance with the Contract documents and in a safe manner for the type of soil and or debris present at a given location.

1.9.3 Civil Survey Slope Staking

Contractor shall coordinate with civil surveyor the task of slope staking excavation limits in the field. This shall include placement of marked slope stakes per Exhibit A, Civil Survey Requirements.

1.9.4 Overhead Power lines

Contractor shall ensure overhead power lines and power poles that remain in-place during remediation activities are protected. When working under energized active overhead power Contractor shall coordinate with Buyer and utility owner and obtain authorized work permits.

1.9.5 Surface Demolition

Remove and stockpile any existing fencing material, railroad rails, railroad ties, power poles, and other at surface demolition items that interferes with the remediation of the waste site and identified for removal as directed by the Buyer.

Any individual piece of concrete, steel, pipe, miscellaneous metal, building debris, structural steel, or conduit shall not exceed 1.2 m (4 ft.) in width, 1.2 m (4 ft.) in depth, or 5.2 m (17 ft.) in length for placement into the roll-on/roll-off containers. Pipes or tubes shall be flattened by the Contractor. Flattened pipes/tubes shall not have any voids exceeding 15 cm (6 in.).

Excluding the steel railroad rails, demolition items shall be loaded in containers for disposal to ERDF. Steel rails shall be stored at a location per the direction of the Buyer for disposition.

1.9.6 Overburden Removal

Overburden removal and stockpiling may be required at each waste site. The Buyer will provide on-going radiological survey support during the excavation and stockpiling operations. The Contractor shall observe the excavation operations continuously. It is anticipated that the overburden removal operation will take place with the immediate transportation of the material for stockpile and radiological survey. The radiological survey results will determine the continuance of the overburden load out operations as the excavation expands horizontally and vertically. The overburden depth within each excavation is determined by the depth of the debris (i.e., piping, concrete, and surrounding soils). In-Progress Civil Survey’s shall be performed at the waste site location and/or the stockpile location at the direction of the Buyer.
1.9.7 Contaminated Soil, Pipeline and Debris Removal

The physical limits of the pipelines and debris shall require that the Contractor to define a depth of excavation 0.305 m (1 ft.) above the known structures, within the soil column. The required depth of excavation is 0.305 m (1 ft.) beneath the lowest point of all pipelines, concrete, and other engineered structures. Side slopes of 1.5 horizontal to 1 vertical (1.5:1). The base width of trench to be determined by Contractor to allow safe access for project personnel. A minimum excavation base width of 1 m (3.28 ft.) laterally beyond the plan-view extent of the pipeline or structure is required. All of the material (soil, piping, concrete, engineered structures) shall be considered contaminated and will be handled as such for loading and transportation to the 100K CTA and then offsite to ERDF for disposal.

Any individual piece of concrete, steel, pipe, miscellaneous metal, building debris, structural steel, or conduit shall not exceed 1.2 m (4 ft.) in width, 1.2 m (4 ft.) in depth, or 5.2 m (17 ft.) in length for placement into the roll-on/roll-off containers. Pipes or tubes may be flattened by the Contractor. Flattened pipes/tubes shall not have any voids exceeding 15 cm (6 in.). Steel plates and pipes shall be size-reduced with mechanical shear to the extent possible. No torch cutting shall be allowed. The Contractor shall clearly define this operation per the Earthwork and Excavation Materials Handling Plan.

The control points and depths shown on the Project Drawings are the expected lateral extent and maximum depth of the excavation. However, it is possible that actual waste site contamination locations may vary from the boundaries shown on the Project Drawings. Consequently, the Buyer reserves the right to alter the shape of excavations. Should the Buyer choose to exercise this right, the Contractor shall excavate to revised limits and the Buyer and Contractor shall maintain documentation of that change per Buyer.

The Contractor shall maintain records of the volume of soil and debris removed during excavation activities. The transportation of overburden material to be stockpiled and the waste/debris handling for disposal shall be documented by varying means and methods. Contractor shall be required to maintain daily counts of overburden transports to the stockpile areas, ERDF containers that are weighed on-site prior to transportation for disposal and civil surveys to true up the excavations throughout the duration of the project. Buyer oversight will be performed through the duration of the project.

Contaminated soil and debris must meet the requirements of the ERDF WAC (ERDF-00011) and Supplemental WAC (ERDF-00003) and shall be loaded into ERDF containers for disposal. Waste that meets the ERDF WAC does not necessarily meet the Supplemental WAC.
1.9.8 Septic Waste Removal

As applicable, septic waste shall be removed, treated (dewatered in accordance with Washington administrative code (WAC) 173-303-140(4)(b), including pathogen reduction in accordance with 40 CFR 503, Appendix B) and contained before transportation to Container Transfer Area (CTA). No cross-contamination is allowed during removal and treatment of septic waste. If the lime stabilization option is executed, the Contractor shall ensure the pH of the stabilized sewage sludge is below pH 12.5 (ERDF WAC). Buyer will support the Contractor in obtaining necessary permits if required. Contractor shall submit their plan for neutralizing sewage waste.

1.9.9 Chemical and Radiological Work Environment

Contractor shall consider and plan for constraints inherent to working in a hazardous chemical and/or radiological environment when planning and executing work. The Contractor shall anticipate and be prepared to perform work operations using different levels of personal protective equipment (PPE) (D, C, and B as defined by OSHA and site specific requirements). PPE shall be provided in a variety of sizes that include the “big and tall” range (e.g., 2XL, 3XL).

1.9.10 Radiological and Chemical Controls

Contractor shall supply material, equipment (for example, radiological rope or chains, yellow rope, T-posts, signage), and personnel required for the demarcation and maintenance of construction, radiological and safety control areas. The Buyer will provide radiological postings (signs and labels) for Contractor installation. The Buyer will provide direction for placement of radiological postings. Radiological and hazardous waste site postings shall be changed as conditions warrant.

Contractor shall maintain radiological work areas in accordance with the Buyer radiological control program. Equipment and personnel will be subject to radiological survey (and possible decontamination) when exiting from a radiological area. The extent of surveying and decontamination will be determined by the Buyer, based on the Contractor's means and methods for performing the work. Radiological controlled areas and materials will not be down-posted until approved by the Buyer.

Contractor shall maintain strict access control to the job site throughout the duration of this contract to prevent unauthorized or inadvertent access to the job site, work areas, and radiologically posted areas. The Contractor shall maintain signs and other access control postings, barriers, and equipment in accordance with Contract Documents. The Contractor shall install additional signs and barriers as directed by the Buyer.

Contractor shall provide access through radiological zones and other work zones. The Contractor shall maintain clear access to groundwater wells, air monitors, etc., and shall accommodate periodic access to these and other points by others. The Buyer will communicate
SECTION 01010
SUMMARY OF WORK

to the Contractor when and where others need access to the site. The Contractor shall challenge anyone accessing the site without prior authorization and shall immediately notify the Buyer of unauthorized access.

1.9.11 ALARA

Utilize as low as reasonably achievable (ALARA) principles and concepts for work activities. Ensure that Contractor personnel and sub-tier contractor personnel maintain strict compliance with radiological work permits (which includes requirements for bioassays, special dosimetry, etc.), area postings, ALARA requirements, surveying, activity hazard analysis, personnel monitoring requirements, and other radiological area entry and exit requirements. Minimize the potential spread of contamination and maintain ALARA principles.

1.9.12 Work Zone Delineation

The delineation and posting of radiological work areas will be used to maintain radiological control of the work area and to minimize the potential for cross-contamination outside of the work area. Any work area where radioactive contamination exists or is likely to exist will be posted by the Contractor as a CA, a SCA or other, as directed by the Buyer. As directed by the Buyer, a radiological buffer area (RBA) may be posted around contaminated work areas (CA, SCA, etc.) by the Contractor based on Contractor’s means and methods and work practices. The Buyer will provide radiological posting (signs and labels) for Contractor installation. The Contractor shall provide T-posts and rope (magenta and yellow), and barriers and guards for radiological postings, as required.

An area will be designated as the exit point from any CA. These exits should be chosen to maintain exposure to radiation and other hazardous materials As Low as Reasonably Achievable (ALARA). The exit area will be for the purpose of PPE doffing, personnel surveying, and potential decontamination. The exit area will include a step-off pad, shoe cover receptacle, and trash receptacle. Equipment and personnel will be subject to a contamination survey upon exit from a CA or RBA, as directed by the Buyer. Where necessary to facilitate the movement of containers when using a temporary container staging area, control zone/work area boundaries may be moved after containers are surveyed and released by the Buyer. Decontamination may be required to release personnel or equipment from areas containing radioactive or chemical contamination.

The Contractor shall provide and maintain RMAs for the storage of radioactive material and equipment used to support radiological work. Reusable PPE that is potentially contaminated shall be stored in an RMA. Only labeled radioactive material may be stored in the RMA, as directed by the Buyer. The RMA shall be posted by the Contractor, as directed by the Buyer. The RMA will contain material stored in sealed bags, boxes, drums, etc. Radiological controlled areas and materials will not be down-posted until approved by the Buyer.
1.9.13 On-Going Radiological Monitoring

During excavation operations, the Contractor shall anticipate Buyer supplied RCT support personnel will be conducting daily testing and screening of the material in the open excavation and the material that has been stockpiled.

1.9.14 Sampling

Buyer will determine when the open excavation of each waste shall require In Process and Verification Sampling.

1.9.14.1 In-Process Sampling

The Buyer is responsible for in-process sampling and analysis activities, which may be performed concurrently with excavation of new materials. Excavation operations may be temporarily halted by the Buyer to facilitate and safeguard sampling and field screening activities. The Contractor shall provide access to survey locations or sample points using the following methods:

- Contouring the excavation or providing (and installing) shoring/ramps to permit worker entry in accordance with the requirements of OSHA; and
- Retrieving soil or debris from using heavy equipment excavation sidewalls and bottom at locations determined by the Buyer.

1.9.14.2 Verification Sampling

Upon completion of waste site excavation, access to the excavation sidewall and bottom soil will be required at discrete sample points for clean site verification sampling. Any portion of equipment used for contouring or retrieving soil (e.g., track hoe bucket) shall be clean and free of radiological and chemical contamination so as not to cross contaminate the excavation sample locations. If cross-contamination occurs, additional excavation and decontamination costs shall be borne by the Contractor, with no allowance for schedule extension.

Stockpiles will be subject to sampling by the Buyer to determine if overburden material and other clean spoils are acceptable for use as backfill.

The Contractor shall ensure the Buyer has access to stockpiles for sampling. Moving materials within the stockpiles will not be permitted until after sampling and Buyer approval. The Contractor shall build stockpiles and maintain them in a manner that allows personnel access onto them.
1.9.15 Area of Contamination

The Area of Contamination (AOC) boundaries are identified on the Project Drawings and are subject to change. Unknown wastes and waste with no identified treatment and/or disposal path must remain within the AOC until directed otherwise by the Buyer. Clean overburden that is to be removed and stockpiled outside the AOC boundaries shall be placed in defined locations as approved by the Buyer and shall be and surveyed for radiological contamination.

1.9.16 Equipment and Personnel Surveys

Equipment and personnel will be subject to radiological survey (and possible decontamination) when exiting from a radiological area. The extent of surveying and decontamination will be determined by the Buyer, based on the Contractor’s means and methods for performing the work.

1.9.17 Cross-Contamination of Excavated Areas

The excavation shall be sequenced such that areas already excavated are not cross contaminated. Material that has been cross contaminated due to waste removal or size reduction shall be removed from the excavation or staging area upon completion of waste removal and size reduction activities. Side slopes of excavations shall be protected to prevent contaminated materials from eroding or sloughing onto uncontaminated areas of the excavation or surrounding areas. Additional material removal and replacement due to cross-contamination shall be performed at no additional expense to the Buyer. Equipment that comes in contact with contaminated material will not be permitted to make contact with uncontaminated material, equipment, or containers until contamination has been removed.

1.9.18 Trenching and Potholing

The Contractor shall excavate potholes (vertically) and trenches (laterally) at the Buyer’s direction during any phase of the project within the limits of the excavation boundary only. Trenching and potholing may be required when an unknown buried pipe or structure has been discovered during normal excavation activities. Trenching and potholing shall help determine the extents and the depth of the unknown pipe or structure.

1.9.19 Plug Pipelines

Plug or cap the exposed end(s) of pipelines that remain in place following completion of waste site excavation to prevent moisture and animal access through the pipeline. In addition, survey the horizontal coordinate and the vertical invert elevation of plug or capped pipeline in accordance with Exhibit A, Civil Surveying Requirements.
1.9.20 Progress Civil Surveys

Contractor shall provide Progress Civil Surveys of the waste site excavation in accordance with Exhibit A, Civil Surveying Requirements. Buyer shall determine with Contractor coordination, the frequency of the surveys. Surveys shall be used to determine progress and the transition elevation from overburden to be stockpiled and contamination to be loaded out.

1.9.21 WASTE LOADING AND CONTAINER TRANSPORT

Container load out shall occur as part of the excavation and material handling activities. ERDF roll-on/roll-off containers will be used for the radiologically contaminated waste and sites containing hazardous and regulated material. Activities to be performed as part of the waste loading and container transport activities include, but not limited to:

- After excavation and material handling activities are complete, load and close the container, and transport containers to the CTA for disposal by others, and ensure containers are properly packaged for shipment.

- Maintain ERDF transport containers from time of delivery until receipt for pickup by others. Maintenance of the containers performed by the ERDF Container Operations. Contractor shall document and provide Buyer any noticeable issues with the containers during load out, survey and staging in the 100K CTA.

- The Contractor shall supply information regarding the container identification, date of excavation, and type and percentage of material types for each container loaded for transport to the ERDF. The Buyer will supply a waste profile that identifies the activity and isotopic makeup of the material. The Contractor shall assist the Buyer in preparation, collection, and placement of shipping papers on containers. The Buyer will provide waste shipping services from the CTA to ERDF.

- The Contractor shall ensure that each container is inspected and the inspection documented. The Contractor shall furnish and install an absorbent sock(s) along the tailgate and a fitted liner into each Buyer- furnished container. The Contractor shall unfold and place the liner in position prior to loading soil into the container. After the liner and sock(s) are installed and the transport container has been filled with material requiring shipment to ERDF, the Contractor shall transport the container to the survey station (as applicable). Buyer personnel will survey the truck and container for release from the Radiological Buffer Area or survey station. If the truck or container is contaminated, the Contractor shall decontaminate the affected area in accordance with approved methods. The Contractor shall fold the liner over the soil, secure the tarp over the container, and then transport the container to the CTA.
Containers ready for shipment shall be weighed using Contractor-furnished scales at a job site location approved by the Buyer. Containers over the maximum weight as specified in Earthwork and Excavated Materials Handling Plan shall be unloaded to meet weight requirements at no additional cost to the Buyer.

Container Liners

Contractor shall provide container liners that are flame-resistant, low-density polyethylene film that meet the specifications as shown in Table 2-1 below.

<table>
<thead>
<tr>
<th>Test Name</th>
<th>ASTM Method Number</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dart drop impact strength</td>
<td>D1709</td>
<td>≥300 grams</td>
</tr>
<tr>
<td>Elmendorf tear strength</td>
<td>D4397</td>
<td>MD≥540 grams</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TD≥1080 grams</td>
</tr>
<tr>
<td>Tensile strength at break</td>
<td>D882.91</td>
<td>MD≥4300 psi</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TD≥3200 psi</td>
</tr>
<tr>
<td>Elongation at break</td>
<td>D882</td>
<td>MD≥430%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TD≥540%</td>
</tr>
<tr>
<td>Vicat softening temperature</td>
<td>D1525</td>
<td>203 degrees Fahrenheit</td>
</tr>
<tr>
<td>Heat deflection temperature at</td>
<td>D648</td>
<td>115 degrees Fahrenheit</td>
</tr>
<tr>
<td>66 psi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1% secant modulus</td>
<td>D4397</td>
<td>MD≥31,000 psi</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TD≥37,000 psi</td>
</tr>
</tbody>
</table>

The liners shall be sized to fit inside the container, and allow a minimum of 0.7 m (2.3 ft.) of overlapping closure and sealing after the liner is filled. The nominal dimensions of the roll-off containers are 6.1-m to 6.7-m long by 2.4-m wide by 1.5-m high (20-to 22-ft long by 8-ft wide by 5-ft high).

A Class 7 (radioactive) material, other than special form, Low Specific Activity or Surface Contaminated Object is permitted in a Type A package. Two liners shall be used for payloads that exceed 30 A2s of radioactive material (up to a maximum of 100 A2s).

If the waste materials have sharp edges, a layer of soft material shall be placed in the bottom of the liner to prevent damage; double liners may be used as need or directed by Buyer.
• The Contractor shall make necessary arrangements to minimize and dispose of secondary waste. Secondary waste includes waste that becomes contaminated as a direct result of remediation operations, not including contaminated soils and debris. Secondary waste that has been designated and approved for disposal at the ERDF shall be bagged and loaded into ERDF containers by the Contractor. The Contractor shall note the contents of the bag and inform the Buyer. Contractor-generated waste that is not contaminated (e.g., miscellaneous trash, non-contaminated used oils, etc.) cannot be disposed in ERDF, and shall be managed and disposed of by the Contractor.

• The Contractor shall be responsible for managing traffic and container inventory (full and empty) to maximize the turnaround of containers and to minimize impacts to container loading and unloading.

1.9.22 POST EXCAVATION

Activities performed at the completion of site remediation activities include, but are not limited to:

• Perform Post-Excavation Civil Surveys for remediated waste sites in accordance with Exhibit A, Civil Surveying Requirements.

• Following completion of excavation activities, stabilize the site with a heavy coating of a dust suppressant (soil-crusting agents/fixants) as approved by the Buyer. The Contractor shall establish erosion control as necessary around open excavations.

• Perform activities to decontaminate equipment exposed to contaminated materials (radiological or chemical).

1.9.23 DEMOBILIZATION

Activities to be performed as part of demobilization include, but are not limited to:

• At the direction of the Buyer, the Contractor may be instructed to remove the CTA, trailer facilities and any lay-down yard at project completion. The removal may include grading to blend with the surrounding area and scarification as necessary of remaining compacted areas. Buyer may collect samples within the disturbed areas and based on the results require Contractor to cleanup areas that may be contaminated.

• Provide “as-built” markup drawings to Buyer including, but not limited to, removed structures and utilities, and structures and utilities left in place following completion of excavation activities. Final post excavation civil surveys of the waste site excavations shall be provided to Buyer.
• Perform site and equipment cleanup at the completion of work, including the cleanup any contamination on the haul roads to the CTA.

• Demobilization shall include the decontamination, radiological survey, and release and removal (as required) of Contractor-owned/leased equipment, tools, facilities, and chemicals or hazardous materials brought onto the site to perform this work.

• A final punch list of actions to be completed (for example, disposal of miscellaneous debris, removal of partially exposed debris, replacement of fencing) prior to completion of demobilization shall also be required.

• Remove all equipment, tools, trailers, trash, and materials at the completion of the Subcontract unless an exception is approved in writing by the Buyer.

• Empty, remove and dispose of all holding tank(s) and contents.

• Leased trailer facilities shall be transitioned to Buyer

END OF SECTION
PART 1 – GENERAL

1.1 REFERENCES

1.1.1 The following documents and others referenced herein form part of Contract to extent designated in this section. Referenced documents are those current as of date of this section unless otherwise indicated.

1.1.1.1 Code of Federal Regulations

29 CFR Part 1926, Subpart P Excavations

1.1.1.2 Department of Energy (DOE)

0334 Hanford Site Excavating, Trenching and Shoring

1.2 ITEMS FURNISHED FOR CONSTRUCTION

1.2.1 Buyer will furnish the following items for incorporation into Work. To arrange transfer, notify Buyer five (5) working days before need.

1.2.2 Contractor shall protect and handle buyer-furnished items in accordance with the Contract’s General Provisions.

1.2.3 Gravel and sand are available to Contractor at no cost from natural deposits at Pit 23 which is approximately 2.5 miles (5 miles round trip), from worksite. Buyer must approve any removal of material for Pit 23. Use of gravel and sand sites is non-exclusive; others may also enter to excavate material required for other work.

If Contractor elects to utilize available gravel and sand sites, they must furnish equipment and labor to excavate, process, load, transport, and place material. Habitation facilities will not be permitted.

Confine removal of overburden and top soil in Pit 23 to Buyer-designated areas. After surface has been disturbed, stabilize blowing sand areas with ballast or other approved method to prevent wind erosion.

Excavation in Pit 23 shall be in accordance with DOE-0334, “Hanford Site Excavation; Trenching; and Shoring” and the Excavation Permit.

Use roads designated by Buyer to access gravel and sand sites and to travel between gravel and sand sites and worksite. If oversize loads are utilized, comply with Section 01500 of this SOW.
Upon completion of operations, remove debris, temporary structures, and equipment. Grade excavated area, properly slope banks, and stabilize area to prevent wind erosion.

Right to use gravel and sand sites may be terminated by Buyer for failure to meet SOW requirements and for abandonment of operations under this SOW. Right to use gravel and sand sites will be terminated without notice upon acceptance of Work under this SOW.

1.2.4 Use of Container Transfer Area (CTA) and Survey Tent (175KE). Maintenance, repair, or improvements of the CTA, Survey Tent and site roadways (such as maintaining the CTA and site roadways uniformly graded for travel and drainage, free of ruts or bumps, and sufficiently watered to prevent generation of dust) shall be the responsibility of the Contractor.

1.2.5 Buyer shall provide roll-on/roll-off containers to Contractor for waste loading and waste shipping. The quantity of containers shall be determined based on remediation activities, project schedule, and ERDF operations.

PART 2 – PRODUCTS
Not Used

PART 3 – EXECUTION
Not Used

END OF SECTION
SECTION 01036
REQUEST FOR CLARIFICATION (RCI) AND CHANGES

PART 1 – GENERAL

1.1 REFERENCES

Not Used

1.2 SUBMITTALS

1.2.1 See Section 01300 for submittal procedures.

1.2.2 Approval Required: None

1.2.3 Approval Not Required: Before starting work, submit name of person responsible for receiving changes to design media in accordance with subsection 1.4.2 below.

1.3 REQUEST FOR CLARIFICATION (RCI)

1.3.1 This Section covers preparation of Contractor-originated Request for Clarification (RCI) (A-6004-833). RCI forms will be supplied during Preconstruction Conference (see Section 01200).

1.3.2 RCIs are used by the Contractor to receive clarification from Buyer at any time during construction. The RCI form is not used to document a contract modification, engineering change, or nonconformance. Buyer’s response to an RCI does not constitute authorization to perform a change to the Contract.

1.3.3 The Contractor may proceed in accordance with the response only on the basis that the Contractor agrees that it is not a contract change. If the Contractor believes the response constitutes a change, the Contractor shall immediately process a Contract Change form (A-6004-820) and await receipt of additional written instruction from the Contract Specialist.

1.3.4 Limit each request to a single issue. Date each request and assign a unique reference number.

1.3.5 Provide pertinent information including Contract number, subject, Drawing numbers, Specification number and paragraph references, date by which response is requested, cost and schedule impacts, site location, descriptive text, and originator’s name and signature.

1.3.6 Correspondence and inquiries from lower tier subcontractors addressed to Buyer will be returned to originator or referred to Contractor.

1.3.7 RCIs shall be prepared in accordance with the form’s instructions.
1.4 CHANGES

1.4.1 Authorized changes to design media will be provided to the Contractor via an approved redline field change drawing, a Design Change Notice (DCN), or a contract modification.

1.4.2 Contractor shall designate a single-point-of-contact responsible for receiving changes to drawings, specifications, and other design media. The designee shall be responsible for maintaining documents and ensuring the most current revision is being used for the performance of work. Documents shall be stored in a manner that minimizes the risk of loss or damage.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION
SECTION 01040
COORDINATION

PART 1 – GENERAL

1.1 COMMUNICATIONS

1.1.1 Written communications between Buyer and Contractor shall be sent to the representatives identified in the Contract. The Contractor may interface with various Buyer (and other) organizations through the Buyer Contract Specialist (or designee), as required.

1.1.2 Applicable interfaces, including existing facilities, systems, features, and environmental conditions that the Contractor may interact with, include the following:

- Radiological Control Technician (RCT)
- Electrical Utilities
- Waste Management
- Quality Assurance
- Environmental Compliance
- Occupational Safety and Industrial Health Specialist

1.1.3 Daily construction activity shall be coordinated with Buyer as identified in the General Provisions for Construction Services, SP-4, entitled “Technical Representative Responsibilities.”

1.2 PREPARATION ACTIVITIES

Contractor shall be responsible for the following functions, requirements, and design criteria preparatory activities:

1.2.1 Ensure equipment, materials, and personnel are ready for the execution of the applicable contract release.

1.2.2 The Contractor shall ensure that Suspect/Counterfeit items are not brought onto the Hanford Site, in accordance with Section 01400.

1.2.3 Ensure all Contractor-supplied tools and equipment are in good working order and free form obvious and known defects, malfunctions and disrepair (e.g., oil leaks, broken and/or missing parts) upon arrival at the job site.

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1.3 SECURITY, BADGES, AND DOSIMETERS

1.3.1 Buyer will arrange for issuance of security badges and dosimeters required for on-site work subject to the requirements identified in Special Provisions – On-Site Services, SP-5.

1.3.2 As soon as practical after award, the Contractor shall submit a badge request for personnel required under the various releases so that they may be scheduled for training and medical evaluation to be eligible for work onsite. A badge is required in order to obtain an HID number, which is needed before training and medical evaluations can be coordinated and scheduled. A minimum of two working days advanced notice is required for a Site badge. Contractor shall wear a Buyer-issued security badge identifying himself/herself.

1.3.3 If required by this SOW, the Contractor shall obtain, at the Contractor’s expense, a facility clearance and security clearance (e.g., Q, L) for employees prior to obtaining access to the job site.

1.3.4 Contractor employees will be required to submit to vehicle searches and not personally carry or transport prohibited articles.

1.4 WORK HOURS

1.4.1 Work will be performed on a 4-10 schedule. The standard workday shall consist of 10 hours of work between the core hours of 6:00 AM to 4:30 PM, Monday through Thursday. No work occurs on Facility Closure Days. If schedule alternative is required, BTR will communicate to Contractor point of contact.

1.4.2 The Contractor will have access to the job site based on the terms of the Contract.

1.5 WORK MANAGEMENT REQUIREMENTS

1.5.1 Performance of Work on other than regular day shift, movement of equipment, electrical system tie-ins, and equipment tie-ins require coordination and prior approval from the BTR or designee.

1.5.2 Work control requirements:

Work shall be performed in accordance with existing PRC-provided procedures, policies, and guidance documents. No work shall be performed that is out of scope of the contract. If work is determined as out of scope or questionable, work shall be stopped and the issue/concern shall be defined and evaluated. Contract revision will be prepared, as necessary.
SECTION 01040
COORDINATION

The Contractor shall develop their written work instructions using the guidelines described in PRC-PRO-WKM-12115, “Work Management.” The work instructions are written specifically to define work scope, identify hazards, and implement mitigating hazard controls described in this SOW and the corresponding Job Safety Analysis (JSA). The work instructions will be placed in Contractor developed work document, and will include the necessary permits and associated project documentation needed to safely complete the work scope at each work location.

Hazard Identification and Control Requirements will include a job hazard analysis that addresses each phase of the work and the hazards associated with the environments at each work site location in accordance with this SOW.

1.5.3 Work release requirements: A Work Release for Construction/Service Organizations. Contractor shall complete the work release form and provide it to the BTR on the afternoon prior to the day work be started. The typical project requires release each day prior to start of work, then again prior to the end of shift for signoff by the BTR. Activities worked each day are limited to items listed on the work release unless additions are approved by the BTR to facilitate unforeseen changes to work scope.

NOTE: The end-of-the-day meeting may be a conference call to plan the following day’s work activities at a time to be determined by the BTR.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION
PART 1 – GENERAL

1. CONTROL POINTS
   1.1 Basic reference points, benchmarks, and other survey data are shown on the Project Drawings.

1. QUALITY CONTROL
   1.1 Quality Controls (e.g., inspections, tests, material identification, nonconformance control, etc.) shall be established, implemented, and documented using a graded approach to verify that design requirements are appropriately satisfied during construction. The specific controls shall be specified in Quality Assurance Plans and implemented through a combination of project procedures, drawings, specifications, and inspection/test plans. See Section 01400.

   1.2 Structural alignment, support location, and grades: For surveying work, use of a land surveyor registered in the State of Washington is required.

   1.3 Layout: Use personnel who are trained, skilled, and experienced in construction staking.

   1.4 Deliverable Documentation: Deliver field notes, records and documentation for Work under this Section in accordance with Section 01720.

1. PROCEDURE
   1.1 Before construction activity and in field, verify control points provided by this section. Verification shall include horizontal coordinates and elevations. Report discrepancies to Buyer before proceeding with construction.

   1.2 Using control points, establish reference points for structural alignment, support location, grades, layout and other construction activity. Record horizontal and vertical data for reference points.

   1.3 Preserve control points, reference points, stakes and other established markers until Buyer authorizes either removal or Work is completed.

   1.4 Refer to SP-4’s reference clause FAR 52.256-27, “Layout of Work.”

PART 2 – PRODUCTS
Not Used

PART 3 – EXECUTION
Not Used

END OF SECTION
PART 1 – GENERAL

1.1 REFERENCES

1.1.1 The following documents and others referenced herein form part of Contract to extent designated in this section. Referenced documents are those current as of the date of this section unless otherwise indicated.

1.1.1.1 Department of Energy (DOE)
- 0336 Hanford Site Lockout/Tag-out
- 0344 Hanford Site Excavating, Trenching and Shoring
- 0346 Hanford Site Fall Protection Program (HSFPP)
- 0359 Hanford Site Electrical Safety Program (HSESP)
- 0360 Hanford Site Confined Space Procedure (HSCSP)

1.1.1.2 Washington State Department of Ecology (Ecology)
- State Waste Discharge Permit

1.1.1.3 National Fire Protection Association (NFPA)
- Fire Code 70-2017 National Electrical Code (NEC)

1.2 SUBMITTALS

Submit all documents.

1.3 SUMMARY

1.3.1 Work elements requiring Hanford Site permits are identified in this section. Permits will be provided by Buyer at no cost, unless otherwise stated.

1.3.2 Notify Buyer five (5) working days in advance of work requiring permit (unless otherwise stated) and furnish requested information. Post permit in a conspicuous location and ensure employees' awareness of permit contents. Meet the requirements set forth in permit.

1.3.3 Permits identified in this section and other sections of the Contract may require use or approval of forms and requests that are not titled as permits but generically referred to as permits. Contractor shall comply with requirements identified on those forms and requests.
SECTION 01065
PERMITS

1.3.4 It is anticipated that Work performed under this SOW will require a Radiological Work Permit (RWP).

1.3.5 It is not anticipated that cultural materials or protected plants or animals will be encountered during project activities in previously disturbed areas. However, workers are to be instructed to watch for bones or possible historic artifacts, especially during excavation. If cultural materials are encountered, stop work within the immediate vicinity of the find and notify Buyer.

1.3.6 Migratory birds may be present at this site and nesting activities shall not be disturbed. If field work is to be initiated during active nesting season (i.e., between mid-March through end of July), Contractor shall contact Buyer to initiate a review of the area where the work is to be performed to make sure no nesting is occurring within the affected area). Workers are to be instructed to watch for active nests. If active nests and/or any nesting birds are encountered, or birds exhibit defensive behavior, the Contractor shall stop work in the immediate vicinity of the nest and shall contact Buyer for additional review and required action.

1.3.7 Ground-disturbing activities have the potential to spread and increase noxious plants. Vehicles should stay on existing roadways, graveled areas, and bare areas to the extent possible.

1.4 PERMITS

1.4.1 Hanford Site Confined Space Hazard Identification (A-6004-724): Required to access potential confined spaces and obtain a Confined Space Entry Permit.

1.4.2 Hanford Confined Space Entry Permit (A-6005-717): Required prior to entry into any area determined to be classified as a Confined Space and containing conditions detrimental to employee safety in accordance with DOE-0360.

1.4.3 Electrical Installation Permit (A-6005-707): One permit covers new electrical installation work governed by the National Electrical Code (NFPA 70).

NOTE: Electrical installations require NEC compliance inspection by a qualified NEC Inspector in accordance with DOE-0359.

1.4.4 Electrical Risk Assessments (ERAs) (A-6007-595) are required for all electrical work in accordance with DOE-0359. The ERA identifies any arc flash and shock hazards.

1.4.5 Hanford Site Excavation Permit (A-7400-373): In accordance with DOE-0344. Required for excavation involving hand digging greater than 12 inches in depth, or machine digging.
1.4.6 Fall Protection Work Permit (A-6004-286 (Rev 6)): Required when fall exposure is 6 feet or greater and the use of conventional fall protection in accordance with DOE-0346. Permit to be accessible during performance of work.

1.4.7 Fire Marshall Permit: Notify Buyer in accordance with SP-4. Required when fire alarm systems, fire sprinkler systems, or fire hydrants will be taken out of service; for new construction and demolition; when using combustible chemicals, compressed gas, explosives, and flammable/combustible liquids; when performing cutting/welding or outdoor burning; and for any activity falling under the scope of NFPA 1.

1.4.8 Hanford Site Oversize/Overweight Permit (A-6003-609): Required for each vehicle and/or non-reducible load that exceeds the dimensions or weights shown in SP-4.

1.4.9 Hot Work Permit (A-6001-895.1): Required prior to performing any work which may produce a spark, arc, or flame on the Hanford Site.

1.4.10 Nonemergency Hydrant Tie-In Permit (A-6005-120): Required for any water being obtained through an existing hydrant. Contractor shall notify Buyer a minimum of 2 weeks prior need, in accordance with SP-4.

1.4.11 Radiological Work Permit (A-6004-603): Required prior to performing any work within a radiological posted area.

1.4.12 Utility/System Outage Permit: This permit is required prior to Lockout/Tag-out isolation of any facility equipment, systems, and/or utilities in accordance with SP-5 and DOE-0336. Notify Buyer 15 days prior to need date. To obtain permit issue an MSA Service Request at the following link:

http://msc.rl.gov/ServiceCatalog/page.cfm/Utilities

1.4.13 State Waste Discharge Permit: Buyer has already obtained the required permit. No discharges of water are allowed or authorized within 300 horizontal feet of any known crib, catch basin, infiltration trench, or underground disposal area.

PART 2 – PRODUCTS
Not Used

PART 3 – EXECUTION
Not Used

END OF SECTION
PART 1 – GENERAL

1.1 REFERENCES

1.1.1 The following documents and others referenced therein form part of Contract to extent designated in this section. Referenced documents are those current as of the date of this section unless otherwise indicated.

1.1.1.1 Code of Federal Regulations (CFR)

Title 29 Labor

Part 1910 Occupational Safety and Health Administration (OSHA)

Part 1926 Safety and Health Regulations for Construction

1.1.1.2 Department of Energy, Richland Operations (DOE-RL)

92-38 Hoisting and Rigging Manual

0359 Hanford Site Electrical Safety Program (HSESP)

1.1.1.3 Institute of Electrical and Electronics Engineers (IEEE)

C2 National Electrical Safety Code (NESC)

1.1.1.4 National Fire Protection Association (NFPA)

70-2017 National Electrical Code (NEC)

70E-2009 Standard for Electrical Safety in the Workplace

1.2 SUBMITTALS

1.2.1 See Section 01300 for submittal procedures.

1.2.2 Approval Required

1.2.2.1 Safety and Health Program: PRC-PRO-SH-40078, Contractor Safety Processes

Appendix F is the preapproved safety and health procedure; however, Contractor may submit, with proposal, an alternate safety program. The alternative program shall comply with federal, state, and local codes and PRC-PRO-SH-40078, Appendix F.

1.2.2.2 Designated Safety Representative: Before starting work, submit name of individual identified as the “Designated Safety Representative,” if the Contractor has more than one employee working on site in performance of this contract, in accordance with
SECTION 01110  
OCCUPATIONAL SAFETY / INDUSTRIAL HYGIENE

Special Provisions – On-Site Services (SP-5). Contractor shall notify the Contract Specialist if the name of the Designated Safety Representative changes.

1.2.2.3 Job Safety Analysis (JSA) / Job Hazard Analysis (JHA): Prior to onsite work, submit JSA/JHA identifying safety hazards as required by this Section.

1.3 SAFETY

1.3.1 Contractor shall comply with the on-site provisions identified in SP-5 of the Contract.

1.3.2 The Contractor shall perform work safely, in a manner that ensures adequate protection for employees, the public, and the environment, and shall be accountable for the safe performance of work. The Contractor shall comply with, and assist Buyer in complying with all applicable laws, regulations and directives.

1.3.3 The Contractor and its lower-tier subcontractors shall take all reasonable precautions in the performance of the work to protect the safety and health of employees and of members of the public. Where there is a difference in regulations or requirements, the most stringent shall apply.

1.3.4 While working within a facility or remote area, Contractor shall participate in emergency drills. Exemptions may be requested by Contractor.

1.3.5 Electrical Safety Requirements

1.3.5.1 Work practices and electrical safety training and qualification shall be in accordance with DOE-0359. Electrical equipment and industrial control panels delivered or brought on to the site in performance of the contract shall be labeled by an organization currently recognized by OSHA as a Nationally Recognized Testing Laboratory (NRTL). Equipment installed as part of the contract shall comply with the NEC and, where applicable, IEEE C2 (NESC).

1.4 HAZARD IDENTIFICATION

1.4.1 Submit a JSA/JHA for general office duties performed in office facilities or ground-level observations/walkthroughs in radiological-controlled areas requiring a General (Not Specific) Radiological Work Permit (RWP) only. Observation activities only are allowed under this JSA/JHA; no hands-on work activities may be performed. Only ground-level observations are permitted; no ladder/scaffolding access is allowed.

1.4.1.1 Prior to performing any other activities, Contractor shall submit a JSA/JHA for the construction activities to be performed.
SECTION 01110
OCCUPATIONAL SAFETY / INDUSTRIAL HYGIENE

1.4.1.2 JSAs/JHAs are prepared by the Contractor to address specific work activities and hazards associated with the specific work and to identify the controls necessary to eliminate or control the hazards. The JSA/JHA shall be written in such a manner as to be understood and usable by Contractor personnel in order to aid them in the identification, control, and response of potential hazards; it is not just a compliance document. To achieve the level of coordination desired, approval of the JSA/JHA are required to ensure proper safety planning and communication prior to the start of work. The JSA/JHA shall be prepared in a format provided by Buyer, and the Contractor shall submit a JSA/JHA for approval prior to work on each release.

1.5 MEDICAL EXAMINATIONS

1.5.1 Medical examinations and Employee Job Task Analysis (EJTA) evaluation forms may be required for Contractor personnel prior to starting work on the Hanford Site. See SP-5.

1.5.2 The Contractor shall immediately notify the BTR and the Contract Specialist of any injuries or incidents; to include damage to Contractor-owned property or equipment.

1.5.3 Contractor shall take appropriate action, up to and including stopping work, and immediately notify the Buyer if an unplanned risk or hazard is discovered that is not covered by directions provided by Buyer. This action includes notifying the Buyer if the work exposes their workers to hazards that require medical monitoring.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

3.1 Buyer will provide Hanford medical facilities for emergency or life-threatening injury situations (those requiring immediate medical attention). All injuries, accidents, fires, and near misses shall be reported to Buyer, including fires that are extinguished without causing damage.

3.2 To ensure worker safety, work or portions of work may be temporarily and incrementally shut down due to high winds, lightning, or other inclement weather as determined by Buyer in accordance with PRC-PRO-SH-28034, Adverse Weather. Contractor shall not be additionally compensated in terms of cost or schedule for weather-related shutdowns. Buyer issues the following warnings via radio system, public announcement, or in person. The Contractor shall ensure that subcontractor personnel are apprised of the warnings and take the required actions as stated below.

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OCCUPATIONAL SAFETY / INDUSTRIAL HYGIENE

- Sustained winds greater than 15 mph – Consult occupation safety professional for assistance. Analyze hazard potential for safe crane the necessity for crane and aerial lift operations.

- Sustained winds greater than 20 mph - Do not use personnel platforms. Personnel performing outdoor work are required to wear safety goggles. Personnel traveling/transitioning to another work location are recommended to wear safety goggles.

- Sustained winds or gusts reach to 25 mph - maintain work site in a safe status by securing and anchoring loose or lightweight materials and objects, debris, tools, and equipment.

- Sustained winds greater than 25 mph, gusts to 35 mph - suspend work on roofs and elevated surfaces. Secure equipment and suspend crane and lifting/hoisting operations. Limit other work to those activities evaluated for safe operations.

- Lighting – Ensure safe work measures are established and implemented when the HMS or NWS-PDTM detects lighting within specified range of the Hanford Site. Suspend all elevated outdoor work activities when lighting is detected with a 50 mile radius. Suspend all outdoor work when lighting is detected within a 10 mile radius.

NOTE: Contractor shall provide personal protective equipment to meet the above conditions.

In addition to these warnings, Buyer also provides the following:

- Snow and ice removal is provided on Site roads. The Contractor shall provide snow removal and ensure safe walking and transfer conditions for walkways and access points around their offices and work areas and the job-site within the project boundaries.

- In response to winter storm conditions, Buyer may close the Site or release Contractor's employees early. If so, Buyer will make appropriate announcements and coordinate the closure or early dismissal.

- The Contractor shall be responsible for freeze protection in all areas turned over to the Contractor by Buyer.

END OF SECTION

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**SECTION 01130**

ENVIRONMENTAL, RADIOLOGICAL, AND NUCLEAR SAFETY

**PART 1 – GENERAL**

1.1 REFERENCES

1.1.1 The following documents and others referenced therein form part of Contract to extent designated in this section. Referenced documents are those current as of the date of this section unless otherwise stated.

1.1.1.1 Code of Federal Regulations (CFR)

Title 10 Energy

Part 830 Procedural Rules for DOE Nuclear Activities

Part 830.122 Quality Assurance Criteria

Part 835 Occupational Radiation Protection

Title 29 Labor

Part 1910 Occupational Safety and Health Administration (OSHA)

Section 1200 Hazard Communication

Part 1926 Safety and Health Regulations for Construction

Title 40 Protection of Environment

Part 82 Protection of Stratospheric Ozone

Part 112 Oil Pollution Prevention

Part 280 Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks (UST)

1.1.1.2 Washington State Department of Ecology (Ecology)

State Waste Discharge Permit

1.1.1.3 National Fire Protection Association (NFPA)

60 Flammable and Combustible Liquids Code

1.1.1.4 Revised Code of Washington (RCW)

Title 46 Motor Vehicles

Chapter 46.11 Vehicle Licenses

01130-1

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100K Waste Sites Remediation & Backfill – Contract #65197
1.2 SUBMITTALS

1.2.1 See Section 01300 for submittal procedures.

1.2.2 Approval Required

1.2.2.1 Waste management information: Five work days before starting work, submit a Waste Management Plan, in accordance with the Special Provisions 4 and 5, for managing waste generated during work.

1.2.2.2 Material Safety data sheets (MSDS and/or SDS): Before starting work, submit MSDS and/or SDS for hazardous chemicals (1.10.2).

1.2.2.3 Chemical sources: Seven (7) work days before starting work, submit detailed information relative to any anticipated process involving the application of volatile chemicals (use of a volatile cleaning agent, application of polyurethane coating, etc.) (1.10.3).

1.2.2.4 Chemical inventory: Five (5) work days before starting work, submit inventory of chemicals that will be brought to the worksite in accordance with SP-4, SP-5, and this Section.

1.2.2.5 Air emissions: Five (5) workdays before starting work, submit inventory of air emissions sources to be used on Site (1.11).

1.2.2.6 Dust control plan: Five (5) workdays before starting work, submit a Dust Control Plan in accordance with the Benton Clean Air Authority (1.11.2.1).

1.2.2.7 Radioactive sources: Seven (7) workdays before starting work, submit a list of all radioactive sources to be brought on Site (1.8.3).

1.2.3 Approval Not Required: None

1.3 WASTE MINIMIZATION

1.3.1 Minimize waste in accordance with the following waste management hierarchy.

a. Source reduction
b. Reuse
c. Recycling
d. Compliant disposal

1.3.1.1 Material substitution: Minimize number of chemicals used to perform same or similar tasks. Where practical, replace hazardous materials with non-hazardous or

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SECTION 01130
ENVIRONMENTAL, RADIOLOGICAL, AND NUCLEAR SAFETY

less hazardous substitutes. Before substitution, obtain approval in accordance with Section 01630.

1.3.1.2 Inventory reduction: Minimize product inventory to reduce accumulation of partially used and unused materials requiring disposal. Remove partially used lots and unused materials from worksite at Contract completion.

1.3.1.3 Packaging: Minimize packaging brought on worksite. Whenever feasible, return empty containers to vendor.

1.3.1.4 Waste segregation: Separate wastes to avoid creating additional wastes and mixtures that cannot be recycled, or that may be more difficult to manage.

1.3.1.5 Process modification: Streamline processes for more efficient operation and less waste generation.

1.3.1.6 Reuse/Recycling: Ensure that materials are reused, if possible, rather than discarded as waste.

1.4 DISPOSAL OF INERT/DEMOLITION AND NONHAZARDOUS WASTE

1.4.1 Handle and dispose of waste in accordance with applicable federal, state, and local laws, regulations and requirements, SP-5 and this Section. Notify Buyer prior to shipment of inert/demolition waste for radiological survey by others if removing from contaminated area.

1.4.2 Non-hazardous: Dispose of non-hazardous debris using bins provided by Contractor.

1.4.3 Any nonradioactive inert waste (i.e. broken asphalt, broken concrete, glass, brick, aluminum, stainless steel, wood, and overburden/spoils material such as rock and earth) may be disposed at no charge to Contractor at Pit 9 located in 200 West Area. Notify Buyer at least 24 hours prior to need for entry.

1.4.4 Other waste generated on the Hanford Site such as demolition rubble, construction debris, trash, and solid waste not included in other waste categories specifically mentioned in the contract shall be dispositioned by Contractor.

1.5 HAZARDOUS WASTE

1.5.1 Hazardous materials shall be managed in accordance with SP-5. Promptly report all spills of hazardous waste.

1.5.2 Flammable/combustible liquid fuel storage shall and dispensed on site shall be in accordance with NFPA 30.
SECTION 01130
ENVIRONMENTAL, RADIOLOGICAL, AND NUCLEAR SAFETY

a. Contractor shall supply Nationally Recognized Testing Laboratory (NRTL) approved tanks, hoses, and dispensing nozzles.

b. Spill containment shall be provided around the tank.

c. At least one approved 10 lb. multi-purpose Type ABC dry chemical fire extinguisher shall be placed outside the entry into the area on a substantial pylon or stanchion.

1.5.2.1 If storing or using oil involves the aggregate storage of >1320 gallons in containers with at least a 55-gallon capacity (including tanks not regulated under 40 CFR 280) in areas where spills or leaks could impact waters of the United States, construction and installation of the storage areas shall be done in accordance with 40 CFR 112. Prior to storage and use of oil, a Spill Prevention Control and Countermeasures (SPCC) Plan shall be developed, then reviewed and certified by a Registered Professional Engineer that it meets 42 CFR 112 SPCC requirements. The Plan shall be submitted for approval, and reviewed and updated as required by 40 CFR 112. The SPCC Plan shall be maintained at the job site. Oil-handling personnel shall receive adequate training in operation and maintenance of equipment to prevent discharges, and comply with applicable pollution-control laws, rules, and regulations; general facility operations; and the contents of the SPCC Plan. Discharge-prevention briefings for oil-handling personnel shall be conducted at least once a year.

a. All flammables and liquids shall be maintained at or below the designated Maximum Allowable Quantities (MAQ) limit per NFPA 30.

b. Have a Hanford Fire Marshal permit issued when the threshold quantities of MSC-RD-8589, Appendix A are exceeded, prior to the arrival of the material on site.

c. Maintained in NRTL approved safety cabinets when not in use,

d. Dispensed from NRTL approved safety containers, as applicable.

e. At least on 10 lb. capacity multi-purpose Type ABC dry chemical fire extinguisher shall be placed within 75 ft. of flammable/combustible liquid storage areas on a substantial pylon or stanchion

1.6 DISPOSAL OF ASBESTOS

1.6.1 Accumulate asbestos debris at the worksite, at approved locations.

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1.7 DISPOSAL OF DANGEROUS AND MIXED WASTE

1.7.1 Handle and dispose of waste in accordance with applicable federal, state, and local laws, regulations and requirements and Buyer procedures. Hanford-specific requirements also apply to dangerous and mixed waste generated on the Hanford Site.

1.7.1.1 Notify Buyer at least five (5) days before generation of waste and immediately after spill and other unforeseen waste generation. Notification shall identify waste stream and provide an estimated quantity of waste to be generated.

1.7.1.2 Upon notification by Contractor, Buyer will establish a satellite accumulation area containers or a 90-day container within worksite and select and provide labeled containers affixed with numbers. Contractor shall provide a digital fish scale or comparable weighing device at satellite accumulation area and shall ensure personnel responsible for the satellite accumulation area are properly trained.

1.7.2 Separately accumulate waste from each waste stream in accordance with applicable federal, state, and local laws.

1.7.2.1 During spill cleanup and waste accumulation, maintain a waste inventory using Waste Inventory Sheet (A-6007-218).

1.7.2.2 Containers are set up and managed by Buyer. Contractor shall manage waste in accordance with SP-5.

1.7.3 Buyer will coordinate pick up and disposal of properly sealed dangerous waste after notification by Contractor.

1.7.4 Buyer will conduct bi-weekly inspection of satellite accumulation areas containers and 60-day containers.

1.8 RADIOLOGICAL CONTROL

1.8.1 If work is deemed Radiological, the Contractor shall be subject to 10 CFR 835, the Buyer Radiological Control Manual, Buyer-00073, and this Section.

1.8.2 Contractor shall not utilize vacuum trucks or HEPA-filtered vacuums, or set up enclosures with exhaustors or similar emission units at any radioactively contaminated location on the Hanford Site without the express written approval of Buyer.

1.8.3 The Contractor shall obtain written approval from Buyer prior to bringing a radioactive source on site. This includes any source or equipment that contains sources (e.g. soil densitometers) that are governed under a U.S. Nuclear Regulatory 01130-5

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ENVIRONMENTAL, RADIOLOGICAL, AND NUCLEAR SAFETY

Commission (NRC) license or a license by an NRC-agreement state. Densitometers shall be checked in daily at the 1262 Building in the 1100 Area.

1.8.4 Contractor’s equipment utilized to perform radiological work shall be subject to an initial radiological baseline survey prior to use onsite. This survey is expected to take approximately one hour (per piece of equipment) to complete. The survey will be conducted by Buyer-provided Radiological Control Technicians (RCTs) and/or Health Physics Technicians (HPTs). Contact the Buyer to schedule the required survey upon arrival of the equipment onsite.

1.8.5 Contractor’s equipment utilized to perform radiological work may be subject to intermittent radiological surveys approximately 2 to 3 times per work day. Radiological surveys are expected to take between 10 – 15 minutes each. Contractor shall make equipment available for intermittent radiological surveys at the request of Buyer-provided RCT/HPT.

1.8.6 Removal of the following requires a contamination release survey for each removal. Contractor will not be charged for survey. Buyer will arrange for survey upon request by Contractor. Allow 8 hours for processing request and 4 hours for survey.

a. Material from radiological areas and radiological buffer areas shown on the Drawings

b. Foreign materials and discolored soil discovered during excavation

c. Equipment

1.8.7 During any work disturbing the existing ground surface, a Buyer-provided RCT/HPT will be present to conduct intermittent radiological surveys of the excavated or disturbed material, if deemed necessary by Buyer. The radiological surveys will be conducted on the spoils removed during any soil excavation as well as on the equipment being utilized for this excavation. These radiological surveys are not expected to significantly disrupt the Contractor’s ability to perform the required work. Contractor shall provide two (2) work days prior notice to Buyer of need for RCT/HPT coverage of any excavation or work activity that will significantly disturb the existing ground surface.

1.8.8 If at any point, radioactive materials above specified action levels are encountered, work shall be stopped immediately. A Radiological Work Permit will be prepared by Buyer to cover working with radiological contaminated soils and materials.

1.8.9 If radiological contamination is encountered during excavation or other work activities, Contractor shall place equipment in a safe condition and remove all
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personnel from area as directed by the RCT/HPT. Radiological controls shall be evaluated by the Radiological Protection organization to the encountered conditions and modified as may be required. Contractor shall seek direction from the Buyer prior to resuming work activities.

1.8.10 A release survey is required to be conducted by Buyer provided RCTs/HPTs of all equipment utilized in excavation. Release survey shall be conducted prior to equipment being removed from the project site. The survey is expected to take approximately one hour per piece of equipment. Contractor shall provide two (2) work days prior Notice to Buyer of need for RCT/HPT coverage to conduct required release surveys.

1.8.11 Contractor may additionally request a contamination release survey for each removal of equipment or material from a radiological buffer area. Contractor will not be charged for survey.

1.8.12 If survey reveals that equipment or material is not radiologically contaminated, dispose of material as planned.

1.8.13 If survey reveals that equipment or material is radiologically contaminated, dispose in accordance with direction from Buyer. Buyer will determine if release back to the Contractor is possible. If not possible, the Contractor will be compensated for items taken.

1.9 NUCLEAR AND CRITICALITY SAFETY

1.9.1 If work is deemed nuclear-related, the Contractor shall be subject to 10 CFR 830.122, and the enforcement actions under 10 CFR 820.

1.10 LIQUID EFFLUENTS

1.10.1 In accordance with SP-4, SP-5, and PRC-PRO-SH-40078 - Contractor Safety Processes, when the Contractor brings chemicals on site, the activity is subject to Buyer’s Chemical Management System Program. The Contractor shall fill out and keep current a Chemical Inventory Worksheet (form A-6004-750).

1.10.2 Material Safety Data Sheets (MSDS and/or SDS) for hazardous chemicals (as defined by 29 CFR 1910.1200) that will be used during the work activity shall be kept current. Contractor shall provide the list to the assigned BTR when list has been updated.

1.10.3 Contractor shall submit detailed information relative to any anticipated process involving the application of volatile chemicals (e.g., use of a volatile cleaning agent, application of polyurethane coating, etc.).
SECTION 01130
ENVIRONMENTAL, RADIOLOGICAL, AND NUCLEAR SAFETY

1.10.4 Concrete rinsate discharge locations require approval by Buyer. Concrete rinsate discharge authorization forms shall be completed and approved prior to discharge.

1.10.5 Liquid discharge for hydro testing, flushing, or other construction operation other than dust control, requires pre-approval by Buyer and shall be performed in accordance with the State Waste Discharge Permit.

- No water shall be discharged within 100 horizontal feet of any known crib, catch basin, infiltration trench, or underground disposal area.
- No discharge shall be allowed within a surface contaminated area (areas with dangerous waste and/or radioactive contaminants), unless discharge is an approved incidental release.
- Other restrictions identified in the State Waste Discharge Permit and the accompanying conditions include the need to reuse/recycle and the need to discharge to the Treated Effluent Disposal Facility; discharge rate, volume, additives, source water, contaminants, and logging are also covered in permit conditions (Pollution Prevention and Best Management Practices section).

1.11 AIR EMISSIONS

1.11.1 The following emissions are regulated and shall comply with applicable federal, state, and local laws, regulations and requirements:

a. Fugitive emissions and dust.
b. Abrasive blasting.
c. Ozone-depleting substances.
d. Non-routine (unplanned) emissions.
e. Radioactive airborne emissions (from disturbing contaminated soil).

1.11.2 Contractor shall take reasonable precautions to minimize fugitive dust during performance of this work.

1.11.2.1 A dust control plan prepared in accordance with Benton Clean Air Authority guidelines shall be submitted by the Contractor and shall be approved by the Buyer prior to commencement of work activities.

1.11.2.2 Any new work which may cause a potential for radioactive dust requires prior BTR approvals since extra measures to prevent and/or control dust may be required.

1.11.3 Contractor shall not conduct open burning without the express written approval of BTR or Construction Manager (CM).
1.11.4 Air emission sources also include non-road internal combustion engines for power generator or air compressor, loader, backhoe, welder, chain saw, etc. Licensed motor vehicles, pursuant to RCW 46.16 are exempt from the inventory. However, mounted internal combustion engines not used to propel the vehicle (e.g.; mounted generator) shall be inventoried.

1.11.5 The Contractor shall comply with PRC-PRO-SH-40078 - Contractor Safety Processes, Appendix F, Section 2.15, for controlling exposures to airborne hexavalent chromium. These requirements are specifically applicable to welding, grinding, torch-cutting, metal buffing and metal polishing, and spray painting activities.

1.12 CONTINGENCIES

1.12.1 Isolate and secure spill area in a manner that protects human health and the environment. Take direct action if nature of spilled or unforeseen waste material is known and if material can be immediately and safely absorbed, neutralized, or otherwise controlled.

1.12.2 Notify Buyer upon occurrence or discovery of hazardous substances and non-hazardous material spills and of unforeseen dangerous waste generation. Notification shall identify waste stream if known and include identification and quantity of waste. Clean up areas contaminated by spilled material and manage spill residues in accordance with this Section.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

END OF SECTION
SECTION 01150
TRAINING AND QUALIFICATIONS

PART 1 – GENERAL

1.1 REFERENCES
1.1.1 The following documents and others referenced therein form part of Contract to extent designated in this section. Referenced documents are those current as of the date of this section unless otherwise stated.

1.1.1.1 Department of Energy, Richland Operations (DOE-RL)
92-36 Hoisting and Rigging Manual
0359 Hanford Site Electrical Safety Program (HSESP)

1.1.1.2 Washington Administrative Code (WAC)
Title 296 Department of Labor and Industries

1.2 SUBMITTALS
1.2.1 See Section 01300 for submittal procedures.

1.2.2 Approval Required
1.2.2.1 Before starting work, submit documentation of successful completion of training requirements and certification that all training is current.

1.3 REQUIREMENTS
1.3.1 General
1.3.1.1 Contractor shall provide appropriately trained and qualified staff to perform the type of work associate with their trade at the Hanford Site.

1.3.1.2 Task- and facility-specific training is required in this Statement of Work (SOW), the Contract Provisions, and other documents referenced herein. The training listed may not be all-inclusive of training required.

1.3.1.3 Required training shall be completed prior to related work being performed.

1.3.1.4 Buyer will provide task- or facility-specific training required for the Hanford Site, which includes the class, instructor, and required training material. Contractor is responsible for cost of labor to complete all required training.
SECTION 01150
TRAINING AND QUALIFICATIONS

1.3.1.5 When offsite equivalent training is available, Contractor is responsible for all training costs. Buyer will provide equivalent onsite training or reimbursement for any equivalent onsite/offsite training costs.

1.3.1.6 Buyer will provide for on-the-job evaluations (OJE) when they are required by Contract.

1.3.1.7 For previous training to be acceptable for Hanford Site qualification, documented evidence shall include type and class of equipment. For qualifications not related to equipment operation, personnel shall have documented evidence of training and experience related to an activity covered under this Contract.

1.3.1.8 Contractor shall maintain copies of personnel training records at the jobsite.

1.3.2 Site-Required Training

1.3.2.1 Buyer General Employee Training (CGET) or Hanford Site Orientation (HGET): Mandatory for all Contractor and sub-tier Contractor personnel performing work on the Hanford Site. Previous CGET training may be acceptable. Contact Buyer.

1.3.3 Qualification Training

1.3.3.1 Electrical work scope shall be performed by qualified electrical workers and qualified instrument specialists in accordance with DOE-0359.

1.3.3.2 Hoisting and Rigging

1.3.3.3 Hanford Site Hoisting and Rigging Manual (DOE-RL-92-36) provides qualification for rigging operations. Contractor shall not perform Hoisting and Rigging activities.
## SECTION 01150
### TRAINING AND QUALIFICATIONS

#### Contract Training Table

<table>
<thead>
<tr>
<th>Hanford Course Number</th>
<th>Course Title</th>
<th>Buyer Documents</th>
<th>Off-site training acceptable (Yes / No)</th>
<th>Comments</th>
<th>Applicable to Contract (Yes / No)</th>
</tr>
</thead>
<tbody>
<tr>
<td>000006</td>
<td>Buyer-General Employee Training (CGET)</td>
<td>N/A</td>
<td>N</td>
<td>• 4 hours. • 1 yr. retraining period. • All Onsite Buyer and Contractor Employees</td>
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<tr>
<td>076200</td>
<td>100K FEHIC/Orientation (CBT)</td>
<td>PRC-PRO-EM-7647</td>
<td>N</td>
<td>• 10 minutes • 1 yr. retraining period</td>
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#### ASBESTOS

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<tbody>
<tr>
<td>170060</td>
<td>Certified Asbestos Supervisor</td>
<td>PRC-STD-SH-52894</td>
<td>Y</td>
<td>• 40 hours day • 1 yr. retraining period. • Present certificate of completion or training record.</td>
<td>Y</td>
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<td>170055</td>
<td>Certified Asbestos Worker</td>
<td>PRC-STD-SH-52894</td>
<td>Y</td>
<td>• 32 hours • 1 yr. retraining period. • Present certificate of completion or training record.</td>
<td>Y</td>
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<td>02006L</td>
<td>Asbestos Awareness</td>
<td>PRC-RD-SH-15097 PRC-RD-SH-15245</td>
<td>Y</td>
<td>• 3 hours. • 1 yr. retraining period. • Present certificate of completion or training record.</td>
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#### CONSTRUCTION JOB SITE SAFETY INSPECTIONS

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<th>Applicable to Contract (Yes / No)</th>
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<tr>
<td>600053</td>
<td>Buyer Competent Person – Construction Job Site Safety Inspection</td>
<td>OSHA CFR TITLE 29 PART 1926</td>
<td>N</td>
<td>• 2 hours • 1 yr. Retraining</td>
<td>Y</td>
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#### CULTURAL RESOURCES TRAINING

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<th>Course Number</th>
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<th>Off-site training acceptable (Yes / No)</th>
<th>Comments</th>
<th>Applicable to Contract (Yes / No)</th>
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<tbody>
<tr>
<td>-</td>
<td>Cultural Resources Training per Cultural Clearance Letter</td>
<td>MSA -1800408</td>
<td>N</td>
<td>• 1 hour</td>
<td>Y</td>
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#### ELECTRICAL SAFETY TRAINING

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<tr>
<th>Course Number</th>
<th>Course Title</th>
<th>Buyer Documents</th>
<th>Off-site training acceptable (Yes / No)</th>
<th>Comments</th>
<th>Applicable to Contract (Yes / No)</th>
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</thead>
<tbody>
<tr>
<td>044480</td>
<td>Electrical Safety for Non-Electrical Workers</td>
<td>DOE-0359</td>
<td>Y</td>
<td>• 4 hours. • 3 yr. retraining period. • Equivalent – 044480. • Present electrician license, journeyman card, certificate of completion or training record.</td>
<td>Y</td>
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<tr>
<td>041680</td>
<td>Batteries</td>
<td>DOE-0359</td>
<td>Y</td>
<td>• 8 hours. • Present certificate of completion or training record.</td>
<td>Y</td>
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<tr>
<td>044605</td>
<td>Equipment Operation Near Power Lines</td>
<td>DOE-0359</td>
<td>Y</td>
<td>• 4 hours. • Present electrician license, journeyman card, certificate of completion or training record.</td>
<td>Y</td>
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</table>
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### TRAINING AND QUALIFICATIONS

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<tr>
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<tr>
<td>EXCAVATION WORK</td>
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<tr>
<td>600056</td>
<td>Buyer Competent Person - Excavation</td>
<td>DOE-0344</td>
<td>N</td>
<td>2 hours Prerequisite 750000</td>
<td>Y</td>
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<tr>
<td>FALL PROTECTION</td>
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<td>600058</td>
<td>Buyer Competent Person – Fall Protection</td>
<td>DOE-0346</td>
<td>N</td>
<td>2 hours Prerequisites 020147 and 020440</td>
<td>Y</td>
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<tr>
<td>020440</td>
<td>Fall Protection PFAS Users</td>
<td>DOE-0346</td>
<td>Y</td>
<td>9 hours. 2 yr. retraining period. United Brotherhood of Carpenters class accepted; MSA Letter RML46000-09-02. Present journeyman card, certificate of completion or training record.</td>
<td>Y</td>
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<tr>
<td>020147</td>
<td>Fall Hazards Recognition and Prevention</td>
<td>TPD-0039 REV 2.4.1</td>
<td>Y</td>
<td>3 hours.</td>
<td>Y</td>
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<tr>
<td>GENERAL SAFETY COURSES</td>
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<tr>
<td>170500</td>
<td>Basic Medic First Aid/ CPR/AED</td>
<td>NFPA – 70E 29CRF 1910.120.151</td>
<td>Y</td>
<td>8.5 hours. 2 yr. retraining period. Labors International Union of North America class accepted; MSA Letter RML46000-09-04. International Union of Operating Engineers class accepted; MSA Letter RML46000-09-05. Present journeyman card, certificate of completion or training record.</td>
<td>Y</td>
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</table>

*At CHPRC, Safety is no accident*

100K Waste Sites Remediation & Backfill – Contract #65197
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### TRAINING AND QUALIFICATIONS

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<th>Applicable to Contract (Yes / No)</th>
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<tbody>
<tr>
<td>020193</td>
<td>Heat Stress Training – CBT</td>
<td>PRC-PRO-SH-121</td>
<td>Y</td>
<td>• 1 hour. • 2 yr. retraining period. • Present certificate of completion or training record.</td>
<td>Y</td>
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<tr>
<td>600023</td>
<td>Buyer Spotter Safety Awareness Briefing</td>
<td>PRC-MP-TQ-011</td>
<td>N</td>
<td>• 1 hour • Orientation/Briefing • Required for all vehicle and equipment operators. <strong>Does not qualify for Equipment Operation Near Power Lines.</strong></td>
<td>Y</td>
</tr>
<tr>
<td>600078</td>
<td>Buyer Vehicle Spotter Awareness Training</td>
<td>PRC-MP-TQ-011</td>
<td>N</td>
<td>• 1 hour • Computer assisted. • Required for all vehicle and equipment operators. <strong>Does not qualify for Equipment Operation Near Power Lines.</strong></td>
<td>Y</td>
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</table>

### HAZARDOUS WASTE WORK

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<tr>
<th>Course Number</th>
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<th>Off-site training acceptable (Yes / No)</th>
<th>Comments</th>
<th>Applicable to Contract (Yes / No)</th>
</tr>
</thead>
<tbody>
<tr>
<td>031220</td>
<td>40-Hour Hazardous Waste Worker – Field</td>
<td>PRC-MP-TQ-011</td>
<td>Y</td>
<td>• 40 hrs. • 1 yr. retraining period. • Training maintains a database of accepted vendors or other DOE sites. • Present certificate of completion or training record. Provide site specific information.</td>
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<tr>
<td>032020</td>
<td>8-Hour Hazardous Waste Refresher</td>
<td>PRC-MP-TQ-011</td>
<td>Y</td>
<td>• 8 hrs. • 1 yr. retraining period. • Training maintains a database of accepted vendors or other DOE sites. • Present certificate of completion or training record. • Provide site specific information.</td>
<td>Y</td>
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<tr>
<td>031310</td>
<td>8-Hour Manager / Supervisor Hazardous Waste</td>
<td>PRC-MP-TQ-011</td>
<td>Y</td>
<td>• 8 hrs. • Training maintains a database of accepted vendors or other DOE sites. • Present certificate of completion or training record.</td>
<td>Y</td>
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## SECTION 01150
### TRAINING AND QUALIFICATIONS

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<tr>
<td></td>
<td><strong>HEARING PROTECTION</strong></td>
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<td>600059</td>
<td>Buyer Competent Person – Hearing Protection</td>
<td>29 CFR 1926.101</td>
<td>N</td>
<td>• 2 hours</td>
<td>Y</td>
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<td>020194</td>
<td>Hearing Conservation - CBT</td>
<td>PRC-PRO-SH-40479</td>
<td>Y</td>
<td>• 1 hour.</td>
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<td>• 1 yr. retraining period.</td>
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<td>• Present certificate of completion or training record.</td>
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<td><strong>FORKLIFTS</strong></td>
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<tr>
<td>044470</td>
<td>Forklift Operational Safety</td>
<td>DOE-RL-92-36</td>
<td>Y</td>
<td>• 6 hours.</td>
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<td>• 3 yr. retraining period.</td>
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<td>MSA Letter CPL.600000-08-03.</td>
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<td>• Present journeyman card, certificate of completion or training record.</td>
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<tr>
<td>041890</td>
<td>Forklift Operator Challenge Examination</td>
<td>DOE-RL-92-36</td>
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<td>• 1 hour</td>
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<td>04467E</td>
<td>Class 6 Forklift - Electric &amp; Internal Combustion Engine (OJE)</td>
<td>DOE-RL-92-36</td>
<td>N</td>
<td>• 3 Hours</td>
<td>Y</td>
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<td>• 3 yr. Retraining</td>
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<td>044673</td>
<td>Class 4, 5 &amp; 7 Forklift – Operator qualification</td>
<td>DOE-RL-92-36</td>
<td>Y</td>
<td>• 3 Hours</td>
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<td>• 3 yr. retraining</td>
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<td>044676</td>
<td>Class 8 Forklift Operator Qualification (OJE)</td>
<td>DOE-RL-92-36</td>
<td>N</td>
<td>• 3 Hours</td>
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<td>• 3 yr. Retraining</td>
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<td>• Prerequisite 044470.</td>
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</tbody>
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100K Waste Sites Remediation & Backfill – Contract #65197
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**TRAINING AND QUALIFICATIONS**

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<tr>
<td><strong>AERIAL LIFTS</strong></td>
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<td>042720</td>
<td>Aerial Lift Operator Training</td>
<td>PRC-RD-SH-10972</td>
<td>Y</td>
<td>• 4.5 hours.</td>
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<td>• 5 yr. retraining period.</td>
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<td>044681</td>
<td>Class 1 Aerial Lift Self Propelled Boom Supported (OJE)</td>
<td>DOE-RL-92-36</td>
<td>N</td>
<td>• Complete a Hanford Site specific OJE.</td>
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<td>04468A</td>
<td>Class 2 Aerial Lift Self Propelled Articulated (OJE)</td>
<td>DOE-RL-92-36</td>
<td>N</td>
<td>• Complete a Hanford Site specific OJE.</td>
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<td><strong>LADDERS - PORTABLE</strong></td>
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<td>044391</td>
<td>Portable Ladder Safety - CBT</td>
<td>PRC-STD-SH-40314</td>
<td>Y</td>
<td>• 1 hour.</td>
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<td>044392</td>
<td>Competent Person Portable Ladder Inspection - CBT</td>
<td>PRC-STD-SH-40314</td>
<td>N</td>
<td>• 1 hour.</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Prerequisite – 044391.</td>
<td></td>
</tr>
<tr>
<td><strong>LEAD (PB) WORK</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>600061</td>
<td>Buyer Competent Person – Lead (PB)</td>
<td>PRC-PRO-SH-40498</td>
<td>N</td>
<td>• 2 hours</td>
<td>Y</td>
</tr>
<tr>
<td>020150</td>
<td>Lead (Pb) Worker Training</td>
<td>PRC-PRO-SH-40498</td>
<td>Y</td>
<td>• 2.5 hours.</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• 1 yr. retraining period.</td>
<td></td>
</tr>
<tr>
<td><strong>LOCKOUT / TAGOUT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>00310I</td>
<td>Hanford Site Lockout/Tag out for Controlling Organization – Initial</td>
<td>DOE-0336</td>
<td>N</td>
<td>• 8 hours.</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• 1 yr. retraining period.</td>
<td></td>
</tr>
<tr>
<td>00310R</td>
<td>Hanford Site Lockout/Tag out for Controlling Organization – Retraining</td>
<td>DOE-0336</td>
<td>N</td>
<td>• 8 hours.</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• 1 yr. retraining period.</td>
<td></td>
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<tr>
<td>00311I</td>
<td>Hanford Site Lockout/Tag out for Authorized Worker - Initial</td>
<td>DOE-0336</td>
<td>N</td>
<td>• 8 hours.</td>
<td>Y</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• 1 yr. retraining period.</td>
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<tr>
<td>00311R</td>
<td>Hanford Site Lockout/Tag out for Authorized Worker - Retraining</td>
<td>DOE-0336</td>
<td>N</td>
<td>• 4 hours.</td>
<td>Y</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• 1 yr. retraining period.</td>
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<tr>
<td><strong>RADIOLOGICAL WORKER TRAINING</strong></td>
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<tr>
<td>020001</td>
<td>Radiological Worker II - Initial</td>
<td>Buyer-00073</td>
<td></td>
<td>• 20 hours</td>
<td>Y</td>
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<tr>
<td></td>
<td></td>
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<td></td>
<td>• 2 yr. retraining period.</td>
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</table>

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100K Waste Sites Remediation & Backfill – Contract #65197
## SECTION 01150
### TRAINING AND QUALIFICATIONS

<table>
<thead>
<tr>
<th>Hanford Course Number</th>
<th>Course Title</th>
<th>Buyer Documents</th>
<th>Off-site training acceptable (Yes / No)</th>
<th>Comments</th>
<th>Applicable to Contract (Yes / No)</th>
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<tbody>
<tr>
<td>0200A1</td>
<td>Radiological Worker II – Initial Accelerated</td>
<td>Buyer-00073</td>
<td>• 5 hours</td>
<td>2 yr. retraining period.</td>
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<td>020003</td>
<td>Radiological Worker II - Retraining</td>
<td>Buyer-00073</td>
<td>• 5 hours</td>
<td>2 yr. retraining period.</td>
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**RESPIRATORY PROTECTION**

NOTE: Prerequisite for any Quantitative Respirator Fit is Course 020066 and a Respiratory Medical Clearance through HPMC

<table>
<thead>
<tr>
<th>Hanford Course Number</th>
<th>Course Title</th>
<th>Buyer Documents</th>
<th>Off-site training acceptable (Yes / No)</th>
<th>Comments</th>
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<tr>
<td>020066</td>
<td>Respiratory Knowledge-Based Initial</td>
<td>DOE-0352</td>
<td>Y</td>
<td>• 8 hours.</td>
<td>Y</td>
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<td></td>
<td></td>
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<td>• 1 yr. retraining period.</td>
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<tr>
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<td>• Present journeyman card, certificate of completion or training record.</td>
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<tr>
<td>020044</td>
<td>Quantitative Mask Fit</td>
<td>DOE-0352</td>
<td>Y</td>
<td>• 1 hour.</td>
<td>Y</td>
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<td>• 1 yr. retraining period.</td>
<td></td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td>• Prerequisite 020066</td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td>• Present certificate of completion or training record.</td>
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<td></td>
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<td>• Medical clearance through HPMC.</td>
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</table>

**SCAFFOLDING**

<table>
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<tr>
<th>Hanford Course Number</th>
<th>Course Title</th>
<th>Buyer Documents</th>
<th>Off-site training acceptable (Yes / No)</th>
<th>Comments</th>
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<tbody>
<tr>
<td>600062</td>
<td>Buyer Competent Person - Scaffold</td>
<td>PRC-PRO-SH-095</td>
<td>N</td>
<td>• 2 hours.</td>
<td>Y</td>
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<tr>
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<td></td>
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<td></td>
<td>• Prerequisites 044371, 044372 and 044373</td>
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<tr>
<td>044373</td>
<td>Scaffold Safety Erector/Dismantle</td>
<td>PRC-PRO-SH-095</td>
<td>Y</td>
<td>• 8 hours.</td>
<td>Y</td>
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<td></td>
<td></td>
<td></td>
<td>• Prerequisite – 044372.</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Equivalent – 044370, 044388.</td>
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<tr>
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<td></td>
<td>• United Brotherhood of Carpenters/Occupational Safety and Health Association Scaffolding Training class accepted; MSA Letter CPL600000-08-01.</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>• Present journeyman card, certificate of completion or training record.</td>
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### SECTION 01150
#### TRAINING AND QUALIFICATIONS

<table>
<thead>
<tr>
<th>Hanford Course Number</th>
<th>Course Title</th>
<th>Buyer Documents</th>
<th>Off-site training acceptable (Yes / No)</th>
<th>Comments</th>
<th>Applicable to Contract (Yes / No)</th>
</tr>
</thead>
</table>
| 044372                | Scaffold Safety for Inspectors        | PRC-PRO-SH-095  | Y                                      | • 9 hours.  
• Equivalent – 044370, 044387.  
• United Brotherhood of Carpenters/Occupational Safety and Health Association Scaffolding Training class accepted; MSA Letter CPL600000-08-01.  
• Present journeyman card, certificate of completion or training record.                                                                 | Y                                 |
| 044371                | Users Scaffold Safety - CBT           | PRC-PRO-SH-095  | Y                                      | • 1 hour.  
• Equivalent – 044370, 044372, 044373, 044383, 171051, 171052.  
• United Brotherhood of Carpenters/Occupational Safety and Health Association Scaffolding Training class accepted; MSA Letter CPL600000-08-01.  
• Present journeyman card, certificate of completion or training record.                                                                 | Y                                 |

**TRANSPORTATION FEDERAL MOTOR CARRIER TRAINING**

| 020083                | Federal Motor Carrier Safety Regulations for Drivers | MSC-PRO-37561 | N                                      | • 3 yr. retraining period.  
• 8 hours  
• Any person who will operate a CMV  
• Equivalent - 020084                                                                 | Y                                 |

**WELDING**

| 600064                | Buyer Competent Person – Welding (Fume Exposure)     | PRC-RD-WLD-23775 | N                                      | • 2 hours                                                                                                                                          | Y                                 |

**QUALITY ASSURANCE TRAINING**

| 170720               | Suspect Counterfeit Items                  | PRC-PRO-QA-301  | N                                      | • 4 hours  
• 1 yr. Retraining                                                                                                                                                      | Y                                 |

---

**PART 2 – KEY PERSONNEL**

Buyer reserves the right to approve all Key Personnel. Contractor’s key personnel must be assigned full-time onsite to this Subcontract exclusively and possess the minimum qualifications

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100K Waste Sites Remediation & Backfill – Contract #65197
SECTION 01150
TRAINING AND QUALIFICATIONS

listed below. Contractor shall not reassign or remove key personnel without prior written authorization of Buyer. Whenever, for any reason, one or more of these individuals are unavailable for assignment for Work under this Subcontract, any replacement key personnel shall possess the minimum qualifications and experience required for the position.

Key personnel must have adequate knowledge of the referenced codes and standards as applicable to the scope of work they are responsible to implement.

When the Buyer finds that a correlation exists or appears to exist between a documented lack of Contractor performance and a lack of Contractor employee qualification performance and/or falsification of experience requirements, the Contractor agrees to immediately replace that individual with another employee with the minimum qualifications appropriate to the work being performed as specified above at no additional cost to the Buyer.

The Buyer may also require that the Contractor be removed from the job, at no additional cost to Buyer, employees who endanger persons or property, disruptive to the workforce, or whose continued employment under this Subcontract is inconsistent with the requirements of the Subcontract and/or interests of safety or security at the Hanford Site.

The Buyer may require the Contractor to remove and replace, at no additional cost to the Buyer, any key person who fails to perform and/or comply with the subcontract requirements. Replacement key personnel shall possess the minimum qualifications and experience required for the position.

The Contractor shall provide three (3) professional references, including current contact phone numbers and addresses, so that the Buyer may verify the qualifying experience requirements.

2.1 Title/Position

The following five key personnel/positions are required for this work. Each person/position, except as noted, is required to be at the work site 100% for the duration of the contract. One individual may perform two positions provided they meet all requirements of the positions.

2.1.1 Project Manager
- 7 years General Construction Management Experience.
- 5 years at Project Management Level, of which 3 years include working with radiological contaminated materials and chemical and hazardous material handling experience.

2.1.2 Craft and Equipment Supervisor
- 10 years Industrial Construction.
- 5 years Supervisory Level, which shall include labor management associated with bargaining units.
- 3 years of supervising work involving radiological contaminated materials and chemical and hazardous material handling experience.
SECTION 01150
TRAINING AND QUALIFICATIONS

2.1.3 Site Health and Safety Officer
- Must have one of the following certifications: Construction Health and Safety Technician, Occupational Health and Safety Technician, Certified Safety Professional from the Board of Certified Safety Professionals. 5 years full time experience in a safety and health position in industrial safety of which 3 years include working with radiological contaminated materials and chemical and hazardous material handling experience.
- Quality Assurance, Security, Radiological Technician does not qualify as applicable safety and health experience. Experience must include a thorough understanding and working knowledge of OSHA, NFPA 1. (latest edition), and other governing requirements associated with performance of the scope of work.

2.1.4 Certified Industrial Hygienist
- Must be certified by the American Board of Industrial Hygiene (ABIH).
- Responsibilities include reviewing, approving, and signing the Respiratory Protection Program (RPP) and Site Specific Health and Safety Plans (SSHSP), completing Industrial Hygiene Exposure Assessments, develop Industrial Hygiene Sampling Plans and conduct weekly on-site assessments of the Contractor’s compliance with the stated documents.
- Must visit the site on a weekly basis and be available to assist the Industrial Hygiene Lead on an as required basis, e.g., change of condition situations.
- Shall provide a written report to the Buyer for each site visit and/or assessment.

2.1.5 Industrial Hygiene Lead
- 3 years’ experience in industrial hygiene monitoring related to hazardous waste sites characterization or remediation.
- Experience must include a thorough understanding and working knowledge of direct reading instruments, personnel exposure monitoring/sampling procedures, and record keeping.
- Must be on-site during waste site excavation and waste handling activities.

PART 3 - EXECUTION

Not Used

END OF SECTION
PART 1 – GENERAL

1.1 SUMMARY

1.1.1 General purposes of conferences and meetings addressed in this Section are coordination, control, and direction of the Work. In addition to meetings addressed by this Section, Contractor may be required by other Sections and other Contract documents to conduct special-purpose meetings and various safety meetings and briefings.

1.1.2 Buyer will issue meeting notices and prepare an agenda and minutes for each conference and meeting addressed in this Section. When applicable, minutes will identify action items, assigned actionees, and due dates.

1.2 SITE LABOR CONFERENCE

1.2.1 Before start of Work, Contractor shall conduct a conference at a time and Hanford Site location agreed upon by Contractor and the Labor Organization representatives.

1.2.2 Invited attendees shall include Buyer, Contractor, subcontractors, Labor Organizations representing utilized crafts, and others having an interest in Hanford Site labor requirements.

1.2.3 Purpose of the conference is familiarization of project participants with Hanford Site labor requirements. Conference shall last approximately one hour and shall include a presentation by the Contractor of the proposed craft utilization and work plan.

1.3 PRECONSTRUCTION CONFERENCE

1.3.1 Before start of the Work, Buyer will conduct a conference at a time and Hanford Site location agreed to by Contractor and Buyer.

1.3.2 Invited attendees will include Buyer, Contractor, subcontractors and others having an interest in the Work

1.3.3 Purpose of the conference is the coordination of Work startup and familiarization of project participants with the Work and worksite. The conference will last approximately two (2) hours and will include the following agenda.

   a. Certified payrolls

   b. Construction Progress Meetings

   c. Forms required by the Contract. Buyer will provide reproducible masters
SECTION 01200
PROJECT MEETINGS

i. Construction Daily Activity Report (A-6004-822)
ii. Work Release for Construction Service Organization (A-6004-967)
iii. Buyer – Change Form (A-6004-820)
iv. Chemical Inventory Worksheet (A-6004-750)
v. Buyer Contractor Document Submittal Form (A-6004-757)
vi. Request for Clarification or Information (RCI) (A-6004-833)
vii. Craft-Specific Job Safety Analysis/Position Hazard Analysis (K-1 JSA/PHA) (A-6004-783)
viii. Job Safety analysis/Activity Hazard Analysis (K-2 JSA/AHA) (A-6004-784)
ix. Task-Specific Job Safety analysis (K-3 JSA) (A-6004-785)

x. Significant Discharge Log (A-6002-294)

xi. Hanford Site Oversize/Overweight Permit (A-6003-609)

d. Material and equipment lists

e. Points of contact and key personnel representing the Contractor and Buyer. Areas covered will include safety, quality assurance and quality control, Price Anderson Amendment Act (PAAA), acceptance inspection, and construction engineering

f. Quality requirements

g. Report requirements

h. Safety

i. Schedule requirements, schedule constraints, and work limitations

j. Submittals

1.4 CONSTRUCTION PROGRESS MEETINGS

1.4.1 Every week Buyer will conduct a progress meeting at time and Hanford Site location determined during the Preconstruction Conference.

1.4.2 Invited attendees will include Buyer, Contractor, and subcontractors.

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100K Waste Sites Remediation & Backfill – Contract #65197
SECTION 01200
PROJECT MEETINGS

1.4.3 The purpose of the meetings is the exchange of Work-related information. Average meeting will last approximately 1 hour and will include the following agenda items:

a. Safety
b. Quality Assurance
c. Progress
d. Submittal Status
e. Schedule, Cost and Construction Status
f. Requests For Information – Status
g. Design and Scope Changes
h. Material and Equipment Status
i. Problem Areas

1.4.4 Contractor to provide six (6) copies of 4-week look-ahead schedule for review during the meeting. Refer to Section 01315 for level of detail required on 4-week look-ahead schedule.

1.4.5 In addition, the Contractor shall provide Buyer with a Daily Field Report identifying the work performed for the day; craft, supervision, and subcontractor manpower; problems, issues, or delays; safety, etc. Daily Field Report shall be submitted to Buyer by 11:00 am each work day documenting the previous work day’s activities.

PART 2 – PRODUCTS
Not Used

PART 3 – EXECUTION
Not Used

END OF SECTION
PART 1 – GENERAL

1.1 SUMMARY

This Section provides the general procedures and requirements for preparing and processing submittals. An example submittal register is shown in this Section. The submittal register may not be all-inclusive, and identifies documents required with proposal submittal, post-award / prior to Notice-To-Proceed (NTP), and post NTP.

1.1.1 Requests for substitutions are prepared in accordance with Section 01630 and processed in accordance with this Section. “Deliverable documents” differ from submittals and are processed in accordance with Section 01720. Deliverable documents are Quality Assurance documents and are required by technical sections of the Specification.

1.2 CLARIFICATIONS

1.2.1 Contract documents take precedence if a conflict exists between Contract documents and the submittal register. Immediately notify Buyer of discrepancies in the submittal register.

1.2.2 Approval of a specific item does not constitute approval of a system or assembly of which an item is a component.

1.2.3 Materials and equipment that differ from approved submittals are subject to rejection and replacement at Contractor’s expense.

1.2.4 Delays arising from failure to provide required submittals in a timely manner will not constitute excusable delays for extension.

1.2.5 Standard processing time of submittals by Buyer is under 1 week and is measured from date of submittal’s receipt by Buyer to date of return mailing.

1.3 SUBMITTAL BY CONTRACTOR

1.3.1 The Contractor submittals identified herein on the submittal register shall be submitted to Buyer Construction Document Control by the Contractor using the Contractor Document Submittal (A-6004-757). Instructions for completion of the submittal are included with the form.

1.3.2 The quantity, frequency, and type of submittal shall agree with the requirements set forth on the submittal register. The submittal number shall be entered on the submittal form by the Contractor in accordance with the submittal register. This number is used to identify each submittal.
1.3.3 When any submittal is returned to the Contractor with a request to resubmit (i.e., marked as: “B-yes” “Minor Comments – Approved With Exceptions as Corrected Re-submittal Required”; or “C” “Not Approved Revise and Resubmit”) the Contractor shall resubmit all corrected documents within the time specified on the returned submittal form, or if no time is specified, within five (5) working days from the disposition date.

1.3.4 Contact the Contract Specialist if additional submittal numbers are required.

1.3.5 Changes to a Contractor’s deliverables that have not been accepted by Buyer as complete shall be re-submitted using the submittal form and in accordance with the Contractor’s Buyer-approved Quality Assurance Program.

1.4 MASTER SUBMITTAL REGISTER

A submittal register will be provided to the Contractor at the time of proposal.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION
# SECTION 01300A
## MASTER SUBMITTAL REGISTER

<table>
<thead>
<tr>
<th>Submittal No.</th>
<th>Type and # of Copies</th>
<th>Technical Submittal</th>
<th>Vendor Information</th>
<th>Description of Submittal</th>
<th>Submittal Date (when required)</th>
<th>Approval Organization</th>
<th>Buyer Review Time Needed (work days)</th>
<th>Contract Paragraph or Requirement Reference</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>2 or E</td>
<td>APW</td>
<td></td>
<td>Waste Handling Plan</td>
<td>Prior to Work</td>
<td>Greg Borden, WMR</td>
<td>2 days</td>
<td>SOW 01130 1.6.1.1</td>
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<tr>
<td>2</td>
<td>2 or E</td>
<td>APW</td>
<td></td>
<td>Medical Qualification Information</td>
<td>Prior to Work</td>
<td>Daren Schwartz, Health &amp; Safety</td>
<td>4 days</td>
<td>SOW 01010 1.6.9</td>
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<tr>
<td>3</td>
<td>2 or E</td>
<td>APW</td>
<td></td>
<td>Key Personnel Resumes</td>
<td>Prior to Mobilization</td>
<td>Jason Elliott, BTR</td>
<td>2 days</td>
<td>SOW 01150 Part 2</td>
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<td>4</td>
<td>2 or E</td>
<td>APW</td>
<td></td>
<td>Chemical Management Plan - Material Safety Data Sheets and Chemical Inventory Worksheet</td>
<td>Prior to Work</td>
<td>Greg Borden, WMR</td>
<td>4 days</td>
<td>SOW 01010 1.6.11, 1.6.13</td>
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<tr>
<td>5</td>
<td>2 or E</td>
<td>APW</td>
<td></td>
<td>Employee Training Records</td>
<td>Prior to Work</td>
<td>Ginger Kidder Training</td>
<td>4 days</td>
<td>SOW 01150 1.2.2.1</td>
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<td>6</td>
<td>2 or E</td>
<td>APW</td>
<td></td>
<td>Earthwork and Excavation Materials Handling Plan</td>
<td>Prior to Mobilization</td>
<td>Scott Werry, Work Management; Daren Schwartz, Health &amp; Safety; Stewart McMahand, ECO; Mitch Kobierowski, Rad. Engineer</td>
<td>4 days</td>
<td>SOW 01010 1.6.11, 1.9.2</td>
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<tr>
<td>7</td>
<td>2 or E</td>
<td>APW</td>
<td></td>
<td>Health and Safety Plan</td>
<td>Prior to Mobilization</td>
<td>Daren Schwartz, Health &amp; Safety</td>
<td>4 days</td>
<td>SOW 01010 1.6.1.1, SOW 01110 1.2.2.1</td>
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<tr>
<td>8</td>
<td>2 or E</td>
<td>APW</td>
<td></td>
<td>JHA/JSA</td>
<td>Prior to Mobilization</td>
<td>Daren Schwartz, Health &amp; Safety; Scott Werry Work Management (JSA)</td>
<td>2 days</td>
<td>SOW 01010 1.6.1.1, SOW 01110 1.2.2.3</td>
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<td>9</td>
<td>2 or E</td>
<td>AP</td>
<td></td>
<td>Cold Weather Protection Plan</td>
<td>Annually, October 1</td>
<td>Jason Elliott, BTR</td>
<td>2 days</td>
<td>SOW 01010 1.6.1.1, 1.7.24</td>
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</table>

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100K Waste Sites Remediation –Contract #65197
## SECTION 01300A
### MASTER SUBMITTAL REGISTER

<table>
<thead>
<tr>
<th>#</th>
<th>Issue</th>
<th>Type</th>
<th>Title</th>
<th>Requirement</th>
<th>Duration</th>
<th>Approval</th>
<th>Reference</th>
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<tbody>
<tr>
<td>10</td>
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<td>AP</td>
<td>Monthly Air Quality Data Summary Record (MAQDSR)</td>
<td>Monthly</td>
<td>Stewart McMahan, ECO</td>
<td>2 days</td>
<td>SOW, 01010 1.6.1.1, 1.7.23</td>
</tr>
<tr>
<td>11</td>
<td>2 or E</td>
<td>APW</td>
<td>Equipment Inspection</td>
<td>Prior to Work</td>
<td>Jason Elliott, BTR</td>
<td>2 days</td>
<td>SOW, 01010 1.6.1.1, 1.8.12</td>
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<tr>
<td>12</td>
<td>2 or E</td>
<td>APW</td>
<td>Preventive Maintenance Program</td>
<td>Prior to Work</td>
<td>Jason Elliott, BTR</td>
<td>4 days</td>
<td>SOW, 01010 1.6.1.1</td>
</tr>
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<td>13</td>
<td>2 or E</td>
<td>APW</td>
<td>Route Plan</td>
<td>Prior to Work</td>
<td>Jason Elliott, BTR</td>
<td>1 day</td>
<td>SOW, 01010 1.6.1.1, 1.6.10</td>
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<td>14</td>
<td>2 or E</td>
<td>APW</td>
<td>OJE/OJT for Operators</td>
<td>Prior to Work</td>
<td>Jason Elliott, BTR</td>
<td>1 day</td>
<td>SOW, 01010 1.6.1.1</td>
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<td>15</td>
<td>2 or E</td>
<td>APW, DWG, PDF</td>
<td>Project Civil Surveys (as required)</td>
<td>Pre-Existing Progress/Interim Post-Excavation</td>
<td>Jason Elliott, BTR, Charles Bentz, Engineering</td>
<td>4 days</td>
<td>SOW, 01010 1.3.4, 1.6.3, 1.8.17, 1.9.1, 1.9.3, 1.9.6, 1.9.7, 1.9.19, 1.9.20, 1.9.22, 1.9.23</td>
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1. Typically a numerical sequence (i.e., 1, 2, 3,…). However, other numbering systems may also be used.
2. Submittal type, number of copies and format:
   - **APW**: Approval Required Prior to Work (Buyer must approve the Contractor’s submittal prior to the Contractor being authorized to proceed with any activity/work associated with the submittal)
   - **AP**: Approval Required (Buyer must approve the Contractor’s submittal, however, work associated with the submittal may proceed prior to Buyer approval)
   - **Format**: Describes the type of submittal required (electronic or printed):
     - **DWG**: An AutoCAD drawing using the Hanford standard formatting (See Buyer-00263, Off-Site Vendor Instructions for the Preparation and Control of Engineering Drawing).
     - **MFC**: Microsoft Format Compatible application (Word, Excel, Access, PowerPoint)
     - **MPP**: Microsoft Project Files
     - **P6**: A Primavera Project Planner schedule
     - **GEN**: General or Open Format/Media
     - **PDF**: Adobe Acrobat (Portable Document Format)

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**100K Waste Sites Remediation – Contract #65197**
SECTION 01300A  
MASTER SUBMITTAL REGISTER

3. Technical submittals are Engineering or Quality affecting submittals. A Yes in this column designates the need for formalized comments, and a formalized comment disposition process by the Contractor. Examples of Technical Submittals would include Engineering or Fabrication Drawings, or Certificates of Conformance.

4. Vendor Information for project record purposes.

5. Description / Document Title. Describe submittal.

6. Required submittal date or its relationship to project milestones. Examples are July 14, 2009, or Award + 15 days, Contract Completion +30 days.

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8. The number of Work Days required for review of the submittal.

PART 1 – GENERAL

1.1 SCHEDULES

1.1.1 Schedule Preparation

1.1.1.1 Prepare schedules using commercial project planning software. Preferred software (used by Buyer) is Primavera Project Planner (P6). Other project planning software may be used if Contractor provides software translation capability to and from Primavera.

1.1.1.2 A sample P6 Activity Code Structure and Work Breakdown Structure (WBS) will be provided to the Contractor in order to assist in the preparation of the Construction Schedule, which will enable communication and downloading of the Contractor’s schedule with Buyer IMES Schedule system.

1.1.1.3 Identify initial project schedule as Revision 0. This schedule, when approved, is the baseline project schedule.

1.1.2 See Section 01300 for submittal procedures.

1.1.3 Approval Required

1.1.3.1 Startup Project Schedule: five (5) days after Notice of Award, submit a schedule covering activities for the first 60 days of Contract, starting with receipt of Notice to Proceed, as specified in 1.2.

1.1.3.2 Project Schedule: 10 days after Notice of Award, submit a schedule covering activities for duration of Contract.

1.1.3.3 Weekly Work Schedules: Provide a 4-week “look ahead” schedule, updated weekly, one day prior to each scheduled Weekly Progress Meeting (1.4.1).

1.1.3.4 Revised Schedules: When required, submit revised project schedules as specified in 1.3.

1.1.3.5 Downtime/delay reports: On a daily basis or on the working day of an occurrence, submit downtime/delay reports.
SECTION 01315
PROJECT SCHEDULES, PROJECT CONTROLS,
AND PROJECT PERFORMANCE MILESTONES

1.1.4 Approval Not Required

1.1.4.1 Progress Reports should be submitted daily no later than close-of-business (COB). Submittal of project schedule will be once each week at schedule meeting with Project Manager and BTR. Thereafter, submit a progress report as specified in 1.5.

1.1.4.2 Weekly labor cost reports: No later than the second day of the following week, submit weekly labor cost reports. Cost reports shall be budget- and quantity-based, and reflect each work element in the WBS. The cost reports shall be updated each week with the progress and variances for each work element. The weekly cost reports shall indicate names of all people charging their time to the project.

1.2 SCHEDULE PREPARATION

1.2.1 The schedule submittal shall include a time-phased performance measurement baseline schedule (PMBS) for completing the individual construction Work.

1.2.2 The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the contract period of performance. Identify critical path activities, including logical sequence and relationship of activities for engineering, design, submittals, procurement, fabrication, delivery, erection, installation, and testing for work covered by Contract.

1.2.3 See submittal register for quantity of copies to be submitted and approval code.

1.3 SCHEDULE REVISIONS

1.3.1 Whenever Buyer determines that there are significant variances between actual and scheduled progress, endangering completion of the Contract Work within the scheduled time, the Contractor may be required to prepare and submit revised project schedules including corrective action plan(s).

1.3.2 Make schedule revisions in accordance with the following:

1.3.2.1 Show progress to date of submittal and projected completion dates for each activity.

1.3.2.2 Identify activities modified since the previous submittal, major changes in scope, and other identifiable changes.

1.3.2.3 Provide a narrative report defining the problem areas, anticipated delays, and schedule impacts.
SECTION 01315
PROJECT SCHEDULES, PROJECT CONTROLS,
AND PROJECT PERFORMANCE MILESTONES

1.3.2.4 Describe corrective action taken, or proposed, and its effect, including changes in schedules of subcontractors.

1.3.3 Send copies of revised schedules to Buyer. Notify subcontractors, suppliers, and other concerned entities, instructing them to promptly report, in writing, problems anticipated due to revisions.

1.3.4 Upon approval, a revised schedule becomes the new baseline.

1.4 WEEKLY WORK SCHEDULE PREPARATION

1.4.1 Each week, prepare a detailed schedule of next 2-week’s work. Base weekly work schedules on the activity schedule. Electronic generation of these schedules is not required. Include the following:

- Work Description
- Location of the Work.
- Work involving outages, overtime, weekends, etc.

1.5 PROGRESS REPORT PREPARATION

1.5.1 Prepare a summary progress report each reporting period, show actual progress versus scheduled progress. Scheduled progress is given by baseline project schedule. Show actual progress in the form of percentages completed for activities or resources.

1.5.2 A variance analysis shall be prepared on the current month and cumulative to date, and shall include cause, impact, and corrective action. Variance analysis shall include explanations, as required, to adequately address problems.

1.5.3 Develop and include a line graph (“S” curve) to show cumulative actual progress versus cumulative scheduled progress. Progress shown shall be consistent with that indicated by the reports.

1.5.4 Update project schedule each reporting period, or more frequently if requested by Buyer, when progress report is prepared. Include an updated data disk and a hard copy of updated schedule with the progress report.

PART 2 – PRODUCTS

Not Used
PART 3 – EXECUTION

Not Used

END OF SECTION
SECTION 01400
QUALITY ASSURANCE AND CONTROL

PART 1 – GENERAL

1.1 REFERENCES

1.1.1 The following documents and others referenced therein form part of Contract to extent designated in this section. Referenced documents are those current as of the date of this Section unless otherwise indicated.

1.1.1.1 American Society for Quality (ASQ)

E4 Specifications and Guidelines for Quality Systems for Environmental Data Collection And Environmental Technology Programs

1.1.1.2 Code of Federal Regulations (CFR)

Title 10 Energy

Part 50 Domestic Licensing of Production and Utilization Facilities

Part 72 Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste

Part 830, Subpart A Quality Assurance Requirements

Title 29 Labor

Part 1910 Occupational Safety and Health Administration (OSHA)

Part 1926 Safety and Health Regulations for Construction

1.1.1.3 Department of Energy (DOE)

Process Guide Identification and Disposition of Suspect/Counterfeit items or Defective items

DOE-0359 Hanford Site Electrical Safety Program (HSESP)

1.1.1.4 Institute of Electrical and Electronics Engineers (IEEE)

C2 National Electrical Safety Code (NESC)

1.1.1.5 National Fire Protection Association (NFPA)

70-2017 National Electrical Code (NEC)
SECTION 01400
QUALITY ASSURANCE AND CONTROL

1.1.1.6 Underwriters Laboratories (UL)

Electrical Appliance and Utilization Equipment Directory
Electrical Construction Materials Directory

1.2 SUBMITTALS

1.2.1 See Section 01300 for submittal procedures.

1.2.2 Approval Required

1.2.2.1 With proposal, submit a written statement warranting that all items supplied under Contract are genuine, new, and unused in accordance with subsection 1.4 below.

1.3 QUALITY ASSURANCE PROGRAM REQUIREMENTS

1.3.1 Contractor is not required to have a written QA program. However, if the contractor does work to a written QA program, then a description of the basis for the program (e.g., ASME NQA-1, ISO 9000, etc.) shall be included in the proposal.

1.3.2 The contractor is responsible for performing quality workmanship in accordance with the requirements within this contract. The contractor is responsible to pass down to any sub tier contractor the applicable requirements of this contract. The contractor must allow access to their facility, work site or sub-contractors facility or worksite at any time during this contract for CHPRC personnel to perform inspections or surveillances.

1.3.3 The Contractor shall have policies and procedures in place to accomplish the following required activities:

1.3.3.1 Management: Program, training/qualification, discrepancy identification, document/records.

- Personnel shall be trained and qualified to ensure they are capable of performing their assigned work. Plans shall address specific training, qualification, and certification requirements. Training shall meet requirements of Section 01150.

1.3.3.2 Performance: Work Processes, Design, Procurement, Inspection, and Testing

Purchased items and services shall meet established requirements and perform as specified. Procurement controls shall include actions to prevent the use of suspect or counterfeit products (1.4).
SECTION 01400
QUALITY ASSURANCE AND CONTROL

Perform and document inspections and testing required by the Specification. Documented inspections shall report the true and physical/functional condition of the inspection activity. As a minimum prepare daily reports when inspections and testing are performed. Reports shall provide sufficient detail to describe inspections and testing performed, with applicable requirements referenced, and results and determinations of inspections and tests shown.

Test procedures, when required, shall include the reference test objectives, prerequisites, and acceptance criteria. Test procedures shall also identify test configuration, safety instructions, instrumentation requirements, required monitoring, and environmental conditions. Test procedures form standards, codes, supplier manuals and equipment maintenance instructions may be used in lieu of specially prepared test procedures.

1.3.4 Electrical/Electronic Product Acceptability

1.3.4.1 Electrical control panels and electrical equipment (a general term to include material, fittings, devices, appliances, luminaries [fixtures], apparatus, and the like used as part of or in connection with an electrical installation) delivered or brought onto the Hanford Site in performance of this Contract shall be listed or labeled by an organization currently recognized by OSHA as a nationally recognized testing laboratory (NRTL) in accordance with DOE-0359.

1.3.4.2 Electrical equipment installed as part of this contract shall comply with the NEC and, where applicable, the NESC. Buyer reserves the right to inspect electrical equipment and installations. Contractor shall notify Buyer when installations are available for NEC inspection.

1.3.4.3 Electric motors shall be manufactured and testing in accordance with NEMA MG-1 as applicable, or listed by an organization currently recognized by OSHA as an NRTL. Documentation of NEMA MG-1 compliance shall be made available to Buyer on request.

1.4 EXCLUDING SUSPECT AND MISREPRESENTED PRODUCTS

1.4.1 Contractor warrants that items provided to Buyer are genuine and unused unless otherwise specified in writing by Buyer. Contractor further warrants that items used during the performance of the Work include genuine, original, and new components, or are otherwise suitable for the intended purpose. The Contractor indemnifies Buyer, its agents, and third parties for any financial loss or property damage resulting directly or indirectly from material, components, or parts that are not genuine, original, and unused, or otherwise suitable for the intended purpose. This includes materials that are defective, suspect, or counterfeit; materials that have been provided
under false pretenses; and materials or items that are materially altered, damaged, deteriorated, degraded, or result in product failure.

1.4.2 Types of material, parts, and components known to have been misrepresented include fasteners; hoisting, shackles, turnbuckles, cable clamps, wire rope, rigging, and lifting equipment; cranes; hoists; valves; pipe and fittings; electrical equipment and devices; plate, bar, shapes, channel members, and other heat-treated materials and structural items; welding rod and electrodes; and computer memory modules. The Contractor’s warranty shall also extend to labels and trademarks or logos affixed, or designed to be affixed, to items supplied or delivered to Buyer. In addition, because falsification of information or documentation may constitute criminal conduct, Buyer may reject and retain such information or items, at no cost; and identify, segregate, and report such information or activities to the DOE.

1.4.3 Contractor shall submit a written statement that “all items furnished under this Contract are genuine (i.e., not counterfeit) and match the quality, test reports, markings, and fitness for use required by the Contract.” The statement shall be on Contractor letterhead and signed by an authorized agent of Contractor.

1.4.4 Any materials furnished as part of this Contract that have been previously found to be suspect/counterfeit by the DOE will not be accepted. For more information about suspect/counterfeit items, refer to Process Guide for the Identification and Disposition of S/CI or defective items at the following link: http://www.hss.doe.gov/sesa/corporatesafety/sci/guide.html

1.5 INSPECTION AND TESTING

1.5.1 Inspection, testing, and documentation addressed under the Field Inspections and Test articles in this Statement of Work shall be performed by qualified Buyer personnel. Contractor is not required to document any inspection or testing within the scope of this contract.

1.5.2 Inspection and testing shall be performed in accordance with this Statement of Work.

1.5.3 Buyer may perform oversight and inspections to verify compliance to requirements.

1.6 DEFICIENCY REPORTING

1.6.1 Contractor shall use the Buyer deficiency reporting system (e.g. nonconformance/deviation reports) to document deviations from requirements.

1.6.2 Dispositions of deficiency reports shall be documented in one of the four following categories: Use-as-is; Reject; Repair; or Rework. Definitions for these categories may be found in ASME NQA-1.

01400-4

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100K Waste Sites Remediation & Backfill – Contract #65197
SECTION 01400
QUALITY ASSURANCE AND CONTROL

1.6.2.1 Clearance of deficiency tags shall be performed or delegated by the initializing organization.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION
SECTION 01500
CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

PART 1 – GENERAL

1.1 REFERENCES

1.1.1 The following documents and others referenced herein form part of Contract to extent designated in this section. Referenced documents are those current as of the date of this section unless otherwise indicated.

1.1.1.1 National Fire Protection Association (NFPA)

701 Methods of Fire Tests for Flame-Resistant Textiles and Films

1.1.1.2 Washington State Department of Transportation (WSDOT)

M 41-10 Road, Bridge, and Municipal Construction

1.2 ACCESS AND PARKING

1.2.1 Buyer will make available parking for a limited number of Contractor’s company vehicles near the worksite, outside of any Limited Area. “No Parking” signs are posted to show fire and emergency lanes. No on-street parking will be permitted.

1.2.2 Parking for a limited number of Contractor’s company vehicles will be made available near worksite, outside Limited area. “No Parking” signs are posted to show fire and emergency lanes. No on-street parking will be permitted.

- Arrange parking at least 30 ft. from the nearest flammable liquids, hazardous chemicals, or hazardous waste areas.

- Locate parking at least 10 ft. from Intermodal Bulk Containers (conex boxes), tents, or other relocatable structures.

- Complete a driver “360°” safety and fire prevention walk around each vehicle before starting or moving the vehicle.

- Complete at least monthly recorded safety and fire prevention for each commercial vehicle.

1.2.3 First Aid: Facilities for first line medical attention are available onsite and are located at the 2719WB building located in the 200 West Area of the Hanford Site. Facilities for radiological decontamination are also available onsite and are located at the 272AW building in the 200 East Area.
SECTION 01500
CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

1.2.4 Operation and Storage Areas: Worksite operations, including storage of materials, shall be designated by Buyer during the preconstruction conference.

1.3 FIELD OFFICE AND PLAN OF THE DAY TRAILER

1.3.1 A Field Office shall be provided by the Contractor during the onsite Construction period. Mobile office MO1126 is currently onsite and the Contractor shall obtain new lease per the contract documents.

1.3.2 Relocatable Structures (conex boxes)

a. Submit construction, occupancy and general arrangement information for relocatable structures for Buyer Fire Protection Engineering review and approval.
   i. The placement of relocatable structures shall comply with NFPA 80A
   ii. No combustible or hazardous materials storage shall be permitted between relocatable structures or any exposed buildings.
   iii. If existing relocatable structures are to be used for this project, they should be inspected for condition, electrical safety, sanitation and plumbing safety, and conformance to DOE standards.
   iv. If new relocatable structures are to be obtained for this project, the modular unit manufacturer’s data sheets and associated certifications shall be submitted for review.
   v. The Project engineer shall coordinate with Buyer Fire Protection Engineering to arrange site surveys in advance of the installation of these units.

b. At least one fire extinguisher shall be provided for each building, preferably located at access door.

c. Where fire extinguishers are installed outside of buildings they shall be equipped with NRTL approved or listed weather covers.

d. Emergency lighting is not required for NFPA 101 for unoccupied structures.

e. The space below the relocatable structure shall be either screened or skirted to prevent the entry of combustible debris or vegetation.

1.3.3 Sufficiently anchor or tie down portable and re-locatable structures, including field offices and storage, to prevent overturning and lateral movement in 70-mph winds. Enclose or skirt under the floor area with non-combustible material to prevent the accumulation of wind-blown debris. Complete the anchoring and enclosure within 14 days after its arrival at the worksite.
SECTION 01500
CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

1.4   TEMPORARY UTILITIES

1.4.1 Electric Power: Available within 250 feet of facility site.

1.4.2 Sanitary Facilities: Not available. Provide and service chemical or other approved sanitary toilets for employee use. Buyer requirements are available on request.

1.4.3 Telephone: Utilities for telephone service are not available. Contractor shall provide cellular phone for emergencies and communication with Buyer.

1.4.4 Computers: Not available, Contractor shall provide their own Computers and WIFI connection.

1.4.5 Water: Drinking water is not available. Contractor shall provide employees with adequate drinking water that meets health and safety requirements.

1.4.6 Buyer will make potable water sources available for use.

1.5   TEMPORARY CONTROLS

1.5.1 Dust Control: Maintain work areas to prevent hazard or nuisance to others. Accomplish dust control by sprinkling or other methods approved by Buyer. Repeat sprinkling at necessary intervals to keep disturbed area damp at all times. Keep sufficient equipment on worksite to accomplish dust control as work proceeds and whenever dust nuisance or hazard occurs. No separate or direct payment will be made for dust control and cost shall be considered incidental to and included in the Contract price.

1.5.2 Temporary Enclosures: Plastic sheeting materials used to form enclosures shall be 6 mils minimum thickness, and have fire retardant properties in accordance with NFPA 701. Framing lumber shall have been treated with fire retardant. Structures shall be inspected and permitted by the Buyer Fire Marshall.

1.5.3 Vehicle and equipment movement

a. Slow moving vehicles and equipment shall not travel on the Hanford Site roads during heavy traffic periods between 6:30 and 8:00 a.m., and 3:30 and 5:30 p.m.

b. Do not block existing roads.

c. Do not park on roadway shoulders.

d. Vehicles that require a portable fire extinguisher in accordance with PRC-PRO-SH-40078, Appendix F, shall have the extinguisher secured in an approved
1.5.4 Traffic Control: Temporary traffic control and barricades shall be in accordance with WSDOT M 41-10, Section 1-07.23(3).

1.5.5 Oversized vehicles and loads:

a. Obtain a Hanford Site Oversize/Overweight Permit from Buyer before movement of oversize loads. See Section 01065. Verify route suitability and limitations before applying for the permit.

b. Display oversize load sign on the front of the towing vehicle and on the rear of the trailing unit. Attach red flags to each corner.

c. Travel between 8:30 a.m. and 2:30 p.m. unless special arrangements are made. Comply with escort vehicle requirements in the permit during travel.

d. Electrical escort requirements: Buyer will provide qualified electrical escorts when loads reach a height of 14 feet or more from the road surface, or when a clearance of at least 20 feet cannot be maintained from overhead electrical or signal lines per DOE-0359 and Hanford Site Oversize/Overweight Permit (A-6003-609). Notify Buyer at least three (3) working days before need. Contractor will not be charged for electrical escorts.

1.5.6 Fuels and Lubricants:

a. Oils, greases and similar materials shall be stored in non-flammable bins or buildings or in a fenced compound remote from other combustible materials as approved by Buyer.

b. "No smoking" signs shall be provided by Contractor and prominently displayed in areas where flammable materials are stored. Additionally, Contractor shall provide and maintain suitable fire extinguisher in such areas.

c. Contractor shall provide all fuel for heating, ventilation and air conditioning of Temporary Facilities (unless these are run using free issue power).

END OF SECTION
PART 1 – SUMMARY

1.1 SUMMARY

This section contains requirements for delivery, inspection, marking, storage, and handling. Product-unique requirements are contained in other sections. Chemicals shall be handled, stored, and tracked in accordance with Section 01130; flammable/combustible liquid storage shall be in accordance with Section 01130.

1.2 DELIVERY

1.2.1 Provide equipment and labor required for unloading, transporting, and handling delivered products.

1.2.2 Material Safety Data Sheets (MSDS and/or SDSs) shall be kept accessible at each jobsite where material is stored. See Section 01130.

1.3 RECEIVING INSPECTION

1.3.1 Arrange for immediate disposal and replacement of products found to be defective, damaged beyond repair, or in otherwise unacceptable condition.

1.3.2 Perform standard inspections and additional inspections required by this Statement of Work.

1.3.3 Dry and clean products that have become wet or have accumulated foreign substances during shipment, but have not become damaged.

1.3.4 Perform additional identification marking of products when necessary to meet requirements of this Statement of Work.

1.3.5 Buyer may inspect products and product marking and storage methods for compliance with this Statement of Work.

1.4 PRODUCT IDENTIFICATION AND SEGREGATION

1.4.1 Provide identification tags or markings for products of similar appearance, or intended for similar use, procured to different specifications, or from different manufacturers. Safety Significant items shall be segregated from general services items, as well as stainless steel from carbon steel.
1.4.2 As applicable, include following information on tags: Manufacturer's name; product brand name; specification number; product type, grade and class; and other information required by other sections of this Statement of Work.

1.4.3 Segregate tagged or marked products and provide separate storage for each product.

1.4.4 Preserve identity of bulk and lot products during storage and in-process work.

1.4.5 Control identification and storage of welding materials in accordance with a written filler metal control procedure. Maintain procedure at jobsite. Procedure shall specify methods for control by heat or lot number during storage and in-process work and for disposal of contaminated and partially used material.

1.4.6 When pipe and tube is removed from storage and prior to cutting, clearly and permanently re-mark remaining pieces with either original markings or field code identification symbols. Return pipe and tube to storage after re-marking.

1.4.7 On pipe and tube, use permanent marking methods such as indelible ink, crayon, paint, and paint stick. Vibratory etching equipment may be used with approval of Buyer. Marking with steel stamps is not acceptable.

1.5 STORAGE

1.5.1 Store packaged products in original, unbroken packages and containers. Leave seals and labels intact.

1.5.2 Store rolled products in upright position.

1.5.3 Store products with finished surfaces in manner that prevents surface damage.

1.5.4 If contact between products could result in damage or reduction of utility, store products far enough apart to prevent contact. If close proximity storage is necessary, provide a barrier between products. Care shall be taken to preclude carbon and halide contamination of stainless steel products.

1.5.5 Keep ports, nozzles, ends, and other openings on equipment, tanks, pipe, and tube capped or plugged during storage.

1.5.6 Follow manufacturer's storage recommendations.

1.5.7 Remove, dispose of, and replace products with expired shelf-life dates. Dispose of hazardous products in accordance with Section 01130.
SECTION 01610
MATERIAL AND EQUIPMENT
DELIVERY, STORAGE, AND HANDLING

1.6 INDOOR STORAGE

1.6.1 Provide indoor storage for products that can be damaged by, or can deteriorate from, changes in temperature and relative humidity.

1.6.2 When required by this Specification, or when recommended by product manufacturer, provide environmentally controlled storage. Maintain temperature 60 to 70°F, relative humidity below 55%, and provide ventilation.

1.7 OUTDOOR STORAGE

1.7.1 Avoid ground contact by providing skids, pallets, platforms, and other supports.

1.7.2 Provide sunshade protection for products that can be damaged by, or can deteriorate from, exposure to sunlight.

1.7.3 Provide weatherproof covers for products that can be damaged by, or can deteriorate from, contact with rain, snow, ice deposits, and blowing sand and debris.

1.7.4 Arrange stacked products so that condensation drains.

1.8 HANDLING

1.8.1 Provide handling tools and equipment, and use methods designed to prevent occurrence of following.

   a. Impact, rubbing, and other contact damage to ends and surfaces of pipe, tube, and other cylindrical products, and to edges, corners, and surfaces of panel, sheet and other flat products.

   b. Twisting, racking, and other distortion of prefabricated structures and equipment assemblies.

   c. Tearing, puncturing, and breaking of wrappings, coverings, and seals on packages and cartons.

   d. Surface contamination of stainless steel products.

END OF SECTION

01610-3

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100K Waste Sites Remediation & Backfill – Contract #65197
SECTION 01630
PRODUCT OPTIONS AND SUBSTITUTIONS

PART 1 – GENERAL

1.1 SUBMITTALS

1.1.1 See Section 01300 for submittal process.

1.1.2 Approval Required

1.1.2.1 Before starting Work or material delivery to the worksite, submit a completed Substitution Approval Request to Buyer for each requested substitution.

1.1.3 Approval Not Required: None

1.2 CONDITIONS

1.2.1 Products include those identified in this Statement of Work, in the Specifications or other contract documents, and on the Drawings. References in the Specifications to products, or to patented or proprietary processes, by trade name, make, or catalog number, shall be regarded as establishing a standard of quality, and shall not be construed as limiting competition. The following conditions and limitations apply:

1.2.1.1 Substitution requires approval of a Buyer Change Form (A-6004-820) if any of the following apply.

- Proposed substitute is more hazardous than the specified product.
- Product callout includes the phrase “or approved substitute.”

1.2.1.2 A substitute may be provided without approval if each of the following apply:

- Product callout does not include the phrase “or approved substitute.”
- Product is identified in this Statement of Work by trade name, make, or catalog number.
- Substitute is equivalent in function, maintainability, reliability, durability, material content, form, and size.

1.2.1.3 Substitution shall be applied to the total quantity of the product required in the Statement of Work. Partial quantity substitutions are not acceptable.

1.2.1.4 Approval of fabrication drawings and other design media does not constitute approval of substitute products identified within the media.

1.2.1.5 Submittals required for a specified item are also required for an approved substitute.
SECTION 01630
PRODUCT OPTIONS AND SUBSTITUTIONS

1.3 CHANGE FORM PREPARATION

1.3.1 Using the Buyer Change Form, identify addressed product by the Statement of Work or Specification section and article or paragraph numbers or by the Drawing number. Provide manufacturer’s name and address, trade name, and model or catalog number. List fabricators as appropriate.

1.3.2 Attach descriptive information to define the operational and physical characteristics of the specified substitute product and to provide a basis for comparison. Include drawings, calculations, and data as appropriate.

1.3.3 Provide an itemized comparison between the proposed substitute and the original specified product. Include the following information:

1.3.3.1 Applicable Statement of Work or Specification section and article or paragraph numbers or applicable Drawing number.

1.3.3.2 Quality and performance comparison. List variations.

1.3.3.3 Cost data. Show the net Contract price change.

1.3.4 List the availability of maintenance service and replacement materials.

1.3.5 State the effect of the substitution on the schedule and identify the changes required in other work or products. Submit drawings, calculations, and vendor data to show the revisions necessary to accommodate the substitution.

PART 2 – PRODUCTS

Not Used

PART 3 – EXECUTION

Not Used

END OF SECTION

01630-2

At CHPRC, Safety is no accident

100K Waste Sites Remediation & Backfill – Contract #65197
PART 1 – GENERAL

1.1 SUMMARY

1.1.1 Hanford Site work requires that certain documents, defined herein, be used to record construction process and administration of the Contract. Buyer will assemble pertinent data for final disposition.

1.1.2 Some data required for project records shall be delivered to Buyer during the course of construction and contract administration, while other data shall be assembled after completion of construction for delivery to Buyer.

1.1.3 Certain information for project records shall be recorded on Buyer-provided forms. These forms are identified in Specifications sections where required. Copies will be supplied during the Preconstruction Conference (see Section 01200).

1.1.4 Project Record Documents, required by Contract, shall be prepared, preserved and delivered to Buyer. These deliverable documents are in addition to submittals required by Section 01300.

1.2 PROCEDURE

1.2.1 Identification and Marking: Mark documents that will become project records before use for construction. Upon completion, identify documents by title or number.

1.2.1.1 Notes or markings added by hand shall be legible, utilizing permanent non-smearing marking media, such as ink or felt tip markers, in contrasting color.

1.2.1.2 Mark items to record actual construction, including changes to dimensions and details, manufacturer’s name, catalog number and substitute products.

1.2.2 Availability: Keep copies of Project Record Documents at the Project site, and make available to Buyer during the progress of the Work.

1.2.3 Storage: Store one (1) set at the Project site, apart from documents used in construction and maintain in a clean dry and legible condition.

1.2.4 Delivery: Record delivery of documents by retaining copies of letters of transmittal itemizing delivered items and reports delivered during the course of the Work. Retain until construction completion. An alternate means, acceptable to Buyer, may be used.
SECTION 01720
PROJECT RECORDS DOCUMENTS

1.3 ACTIVITY AND ADMINISTRATIVE DOCUMENTS

1.3.1 Deliver or retain in accordance with the following:

1.3.1.1 Certified Payrolls: Deliver certified payrolls as required by the Contract Provisions to Buyer. Progress payments will not be processed unless certified payrolls for work

1.3.1.2 Construction Daily Activity Report (A-6004-822): Before noon each day, deliver to Buyer one copy of an activity report, covering labor and supervision of Contractor and subcontractors for the previous day. The report shall include a general description of the Work performed, and a list of major items of equipment that are onsite.

1.3.1.3 Weekly Manpower Reports: Prepare weekly manpower reports and deliver to Buyer before 10 a.m. on Monday, for the previous week, during the performance of the Contract.

1.3.1.4 Subcontracting Plan Reports: Deliver reports to Buyer documenting conformance with the approved Subcontracting Plan, as required by SP-11.

1.3.1.5 Pre-Job Briefing Checklist: Prepare checklist during each pre-job briefing and post-job review. Deliver checklists to Buyer within 5 days after briefing.

1.3.1.6 Trip Tickets: Deliver copies to Buyer with each truck load of concrete and retain Contractor copies until Contract closeout. After closeout, deliver to Buyer.

1.4 CONSTRUCTION, QUALITY ASSURANCE AND SUPPORTING DOCUMENTS

1.4.1 Deliver in accordance with the following, when called for in the Specification Sections:

1.4.1.1 Significant Discharge Log: Log water discharged each workday and deliver discharge log (A-6002-294) to Buyer.

1.4.1.2 Flushing Records: Deliver to Buyer one copy of records verifying acceptable completion of flushing, before testing.

1.4.1.3 Leak/Pressure Testing Records: Deliver to Buyer one copy of records verifying acceptable completion of leak and pressure testing, within five days after completion.

1.4.1.4 Calibration Records: Deliver to Buyer one copy of instrument calibration records five days after Contract completion.

1.5 PRODUCT SAMPLES AND MANUFACTURER’S INSTRUCTIONS
SECTION 01720
PROJECT RECORDS DOCUMENTS

1.5.1 In addition to the submittals required in Section 01300, and the requirements of this Section, information received by Contractor (from suppliers) that document products used and how they were installed shall be delivered to Buyer as Project Records.

PART 2 – PRODUCTS
Not Used

PART 3 – EXECUTION
Not Used

END OF SECTION