



**STATEMENT OF WORK
FOR
CONSTRUCTION**

Requisition # 379586

**Grout and Fixative Delivery System Fabrication, Installation, and Stabilization of the 324
Facility**

Revision Number: 0

Date: 2-27-2025

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Division 1, “General Requirements” are part of the Buyer Construction Statement of Work

SECTION 01010 SUMMARY OF WORK

1.0 **OBJECTIVE**

The Central Plateau Cleanup Company (CPCCo) hereafter referred to as Buyer, in its capacity as a prime Contractor to the Department of Energy (DOE), requires the services of a subcontractor to provide personnel, materials, equipment, fabrication, installation, testing and operation of equipment designed by others to stabilize radioactive contamination within the boundaries of the 324 Building located in the 300 area on the Hanford site.

1.1 **BACKGROUND**

A summary of the 324 Building, its remediation background and the cleanup approach is provided below.

1.1.1 **324 Building Background**

The 324 Building was constructed from 1964 to 1966 as a nuclear fuel recycle pilot plant and, in that capacity, provided chemical processing and metallurgical examination of nuclear fuel elements. Therefore, the facility housed both radiochemical and radio-metallurgical hot cells and laboratories. In addition, the facility supported the first waste vitrification programs in the world and processed cesium chloride capsules for medical applications. As a result of these operations and unplanned operational events, the facility and underlying soil were highly contaminated with cesium (Cs-137) and strontium (Sr-90).

1.1.2 **Stabilization and Demolition Project Background**

Between 2010 and 2016 the 324 Building was being prepared for isolation from utilities (power and water) to achieve a “cold, dark and dry” condition as a precursor to building demolition. Previous activities included the design and fabrication of some equipment to stabilize radioactive contamination. However, as these activities were proceeding, radiological surveys of the soil underlying the building (specifically in the vicinity of B-Cell) revealed extensive radioactive contamination (in the form of Cs-137 and Sr-90) below the cell, primarily beneath the seam between the cell floor and cell walls.

A plan was developed to remotely cut through the floor of B-Cell and excavate enough of the contaminated soil to lower the dose rate sufficiently to allow demolition of the building. Following demolition activities, the plan provided for remediation of the remainder of the soil. However, during preparations for cutting the B-Cell floor, additional contamination was discovered in the soil outside the cell footprint and beyond the reach of the excavation equipment. Therefore, work removing the floor stopped pending review of alternative approaches to completing the project.

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1.1.3 Selected Approach

Building 324 contamination will be stabilized, operational controls terminated (stepped-out) and the facility shutdown. Once shutdown, the above ground structures of Building 324 will be demolished facilitating removal of the contaminated soils underlying the facility.

The Grout and Fixative Delivery system will stabilize Building 324 radioactive contamination and support safe shutdown of the facility and systems. The system design will be provided to the Contractor by the Buyer for fabrication, testing, installation and operation.

1.1.4 Exhibits

The following exhibits are included to support the Contractor's understanding of stabilization approach and establish details to perform the execution of the work scope defined in Section 1.3:

1. Exhibit A – Planning Documents
2. Exhibit B – Grout and Fixative Delivery System Design package
3. Exhibit C – Sequence of Work

1.2 SCOPE

The Contractor shall provide all personnel, materials, equipment, fabrication, testing, installation (including facility modifications as required) and operation of stabilization equipment required to implement the design package provided in Exhibit B. Key elements of the design include:

- Design of a grout delivery system
- Design of a fixative delivery system
- Cell and door sealing requirements
- Equipment testing requirements
- Available utilities and support systems
- Sequence of work

The project endpoint is completion of all grout encapsulation, fixative application and supporting activities as described in the Exhibit C, Sequenced Activity Plan. Completion of these activities achieves specific step out criteria #2 and #4 - #10 as outlined by CPCC-01001, "324 Building Step Out Criteria Planning".

SECTION 01010 SUMMARY OF WORK

Project execution will be in accordance with the General Requirements provided in detail beginning with section 01036 Request for Clarification (RCI) and Change of this SOW.

This scope is subdivided into 8 tasks:

- Task 1 – Mobilization and training
- Task 2 – Component Fabrication
- Task 3 – Component Testing
- Task 4 - REC Grout & Fixative System Installation
- Task 5 - REC Grouting & Fixative Application
- Task 6 - HLV/LLV and A-Frame Grout System Installation
- Task 7 - HLV/LLV and A-Frame Grout Application
- Task 8 - Demobilization

1.2.1 Task 1 – Mobilization and Training

- As part of the work scope, the Contractor shall secure all necessary certifications, medical exams, and training required prior to performing any on-site work.
- The Contractor shall mobilize required labor to the work site for work package development and initial set up activities. Submittals required prior to start of work shall be submitted to and approved by Buyer.
- Prior to start of work the Contractor shall demonstrate compliance with Buyers requirements for screening tests for illegal/unauthorized substances in accordance with site access requirements.
- Develop and submit a training plan for Buyer approval that specifies training and qualification requirements for all personnel. Upon Buyer approval, the Contractor shall implement the training and qualification plan.
- Establish offsite fabrication and testing facilities within 4 hours driving time of the Hanford site
- Maintenance and janitorial services for Buyer supplied facilities turned over to the contractor are the responsibility of the Contractor.

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SECTION 01010 SUMMARY OF WORK

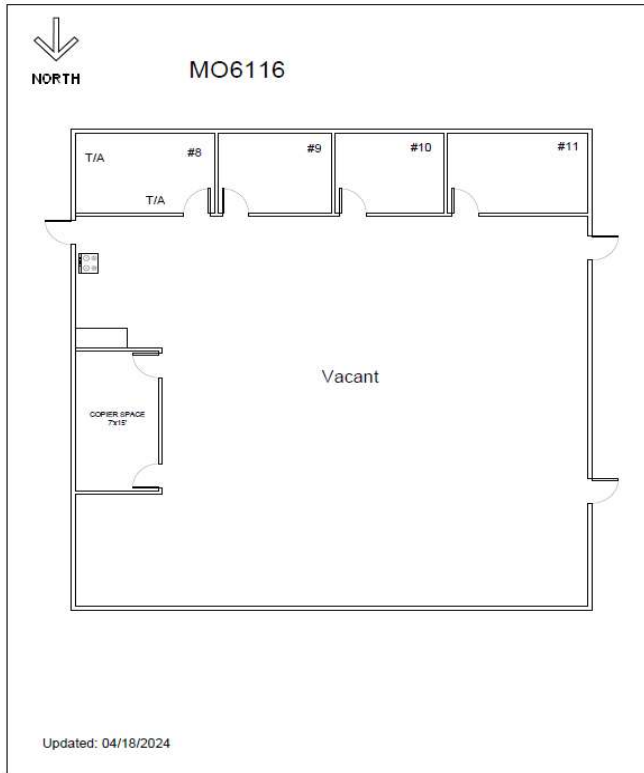
- MO-6116 will be provided to the contractor for exempt and craft personnel
- Preventative maintenance required for MO-6116 includes:
 - Monthly GFCI Inspection/Testing (3S-32831)
- Contractor shall provide a Building Administrator as required per CPCC-PRO-PMT-52688 (3.6)



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1.2.2 Task 2 – Component Fabrication

The Contractor shall fabricate at contractors' facilities all equipment identified in the Exhibit B design package. Key elements of this task include:

- Per Buyer provided design initiate procurement of materials, equipment and any subcontractor services proposed.
- Initiate Contractor fabrication activities per Buyer provided design and sequenced activity plan.

1.2.3 Task 3 – Component Testing

The Contractor shall conduct equipment testing at the Contractor's facilities in accordance with the testing requirements of Exhibit B. Key elements of this task include:

- Contractor shall provide the Buyer with adequate notice of testing to enable the Buyer's attendance as required.
- Acceptance testing will be implemented following the Buyer provided test plan.

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SECTION 01010 SUMMARY OF WORK

- Spaces (REC cells, Pipe Trench, ducts...etc.) will be simulated with simplified construction (plywood, plastics, etc.). Test plans and test results will be documented to ensure the results can be replicated during application within the 324 facility.
- Deficiencies identified during testing activities will be submitted to the Buyer for review. Corrective actions and cost impacts will be approved by the Buyer prior to implementation.
- Complete and submit Factory acceptance test report for Buyer review and approval.

1.2.4 Task 4 – REC Grout & Fixative System Installation

The Contractor will mobilize equipment and remaining personnel to Building 324 to support installation of the REC Grout & Fixative System Installation. Key elements of this task include:

- Participate in and support Buyers work control process, through development, approval and release of work packages.
- Obtain Buyer and Building 324 organization approvals for installation activities. Coordinate integration of the installation schedule with Building 324 work schedules.
- Perform facility modifications (core drilling / system set up) and installation activities in the 324 Building.
- Installation will occur as a series of sequenced activities outlined in Buyer provided sequenced activity plan (Exhibit C)
- Identify and stage waste material to be dispositioned by Buyer
- Install any temporary power supplies as needed (generators)

1.2.5 Task 5 - REC Grout Placement & Fixative Application

The Contractor will operate the grout and fixative delivery systems to complete the activities outlined in Exhibit C. Key elements of this task include:

- Participate in and support Buyers work control process, through development, approval and release of work packages.
- Obtain Buyer and Building 324 organization approvals for operations activities. Coordinate integration of the operations schedule with Building 324 work schedules.

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SECTION 01010 SUMMARY OF WORK

- Upon Buyer direction, perform operation of the equipment and systems required to perform the activities outlined in Exhibit C. Perform steps in order as required.
- Identify and stage waste material to be dispositioned by Buyer

1.2.6 Task 6 - HLV/LLV and A-Frame Grout System Installation

- Participate in and support Buyers work control process, through development, approval and release of work packages.
- Obtain Buyer and Building 324 organization approvals for installation activities. Coordinate integration of the installation schedule with Building 324 work schedules.
- Perform facility modifications (core drilling / system set up) and installation activities in the 324 Building.
- Installation activities will occur as a series of sequenced activities outlined in Buyer provided sequenced activity plan (Exhibit C)

1.2.7 Task 7 - HLV/LLV and A-Frame Grout Placement

The Contractor will operate the grout delivery systems to complete the activities outlined in Exhibit C. Key elements of this task include:

- Participate in and support Buyers work control process, through development, approval and release of work packages.
- Obtain Buyer and Building 324 organization approvals for operations activities. Coordinate integration of the operations schedule with Building 324 work schedules.
- Upon Buyer direction, perform operation of the equipment and systems required to perform the activities described in Exhibit C. Perform steps in order as required.
- Identify and stage waste material to be dispositioned by Buyer

1.2.8 Task 8 – Demobilization

- Upon completion of operations activities and Buyer approval, demobilize in accordance with demobilization plans.
- Inventory and turnover any Buyer purchased equipment, material, tools and supplies. Inventory shall include description of item, part number, quantity and location of storage. Turnover of these items shall be coordinated through the Buyers Field Work Supervisor (FWS) and Buyers Technical Representative (BTR).

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SUMMARY OF WORK**

- Remove all contractor owned equipment, materials, tools, supplies and personnel.

1.2.9 Items Furnished for Construction

Quantity	Item	Date Available	Specification Section or Drawing Number	Storage Location	Delivery to Worksite by	Miles to Worksite
4	Landing Pass Through	Immediately	3003705; Detail 2	324 Facility	N/A	0
1	B-Cell Grout Inlet Pipe	Immediately	3003705; Detail 6	324 Facility	N/A	0
1	A-Cell Grout Inlet Pipe	Immediately	3003705; Detail 8	324 Facility	N/A	0

1.3 EXCLUDED WORK:

The following are not part of this Contract.

- Operation of facility equipment (Cranes, manipulators, ventilation controls, etc....)
- Items shown on design documents (drawings, specifications) to be completed by others.
- LO/TO Controlling Organization and Administrator duties
- Connection to or modification of facility electrical systems
- Radiological Control (Rad Con) engineering and Radiological Control Technician (RCT) support
- Industrial Hygiene support
- Facility Modification Packages
- Engineering design updates
- Fire Marshall Permits
- Preparing Work Control Documents
- Daily work releases
- Providing, cleaning, and issuing respiratory equipment
- Providing and cleaning radiological Personal Protective Equipment (PPE)

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- Transportation and packaging of waste from the 324 facility to disposal site(s)
- HCA donning and doffing support

1.4 **EXHIBITS AND GENERAL REQUIREMENTS**

1.4.1 Exhibits: The exhibits applicable to the Scope are included in Table 1 on the following page.

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**SECTION 01010
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TABLE 1 – SUMMARY OF EXHIBITS

EXHIBIT A - Planning			
Type	Document Number	Revision	Title
Technical Requirement	CPCC-01001	0	324 Building Step Out Criteria Planning
Technical Requirement	CPCC-00870	0	Safety Basis Step-Out Criteria for the 324 Facility
Reference Only	CPCC-00996	0	324 Building Stabilization Planning
Reference Only	0617081	N/A	Engineering Evaluation of Fogging Nozzle Fixative Application SAT Validation Testing Result
Reference Only	N/A	N/A	High Level and Low Level Vault Pre-Demolition Stabilization Plan Building 324
Reference Only	CPCC-SRP-TR-00018	0	324 Building Radiochemical Engineering Complex Cell Door Sealing Test Report
EXHIBIT B - Design			
Type	Document Number	Revision	Title
Technical Requirement	RPT-3003739-000	0	Grout and Fixative Delivery System Design
Technical Requirement	PRC-SRP-00216	0	Specification for Concrete and Grout
Technical Requirement	00373-25100	0	Hanford Building 324 – Cell Sprayer Model B

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Technical Requirement	00373-31000	0	Hanford Building 324 – Crane Deployed Fogging Tool
EXHIBIT C – Sequence of Work			
Type	Document Number	Revision	Title
Technical Requirement	PLN-3005699-A	N/A	Sequenced Activity Plan
Reference Only	N/A	N/A	324 Building Radiation Control Maps

END OF SECTION

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SECTION 01036
REQUEST FOR CLARIFICATION (RCI) AND CHANGES

PART 1 – GENERAL

1.1 **REFERENCES**

Not Used

1.2 **SUBMITTALS**

1.2.1 CPCC’s Document Management and Control System (DMCS) will be used to electronically manage document RCIs for this contract.

1.2.2 Approval Required:

1.2.3 Submit all RCIs to PDCDC@rl.gov for disposition.

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

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 are available on the Buyer web site at the following link: [Submittals, Forms & Docs - Central Plateau Cleanup Company \(hanford.gov\)](http://hanford.gov).

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.

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SECTION 01036
REQUEST FOR CLARIFICATION (RCI) AND CHANGES

1.3.7 RCI 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 a contract modification. Changes may be transmitted to the Contractor via an approved redline field change drawing and/or Engineering Change Request (ECR) or a contract modification formally transmitted to the Contractor requesting Contractor's proposal and agreement prior to authorization of the change.

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.

END OF SECTION

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SECTION 01040 COORDINATION

PART 1 – GENERAL

1.1 COMMUNICATIONS

1.1.1 Written communications between Buyer and Contractor shall be sent to the Buyer representative identified under “Contract Correspondence” in the Contract document Part IV – Special Terms section of the Contract Document. 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:

- CPCCo Buyers Technical Representative
- CPCCo Field Work Supervisor
- CPCCo Project Manager
- CPCCo Responsible Manager
- CPCCo Engineering
- CPCCo Radiological Control
- CPCCo Work Management
- CPCCo Work Planner
- CPCCo Waste Management
- CPCCo Quality Assurance
- CPCCo Environmental Compliance Officer
- CPCCo Occupational Safety & Industrial Hygiene (OS&IH)
- CPCCo Emergency Preparedness Manager
- CPCCo Fire Protection
- CPCCo Shift Operations Manager

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SECTION 01040 COORDINATION

- 1.1.3 Daily construction activity shall be coordinated with Buyer.
- 1.1.4 When working in a Buyer-designated nuclear facility, Contractor shall be subject to Buyer facility operation constraints and requirements including facility operational control, procedure compliance/interpretation, and stop work provisions. Contractor personnel shall respect and adhere to directions received from facility operation personnel when conducting work within the designated facility.
- 1.1.5 Buyer may assign a Senior Supervisory Watch (SSW) to provide Buyer management presence at the job site. The primary purpose of the SSW is to closely oversee on-going work and to serve as an active communicator to ensure safe, effective, and environmentally conscious work.

1.2 PREPARATION ACTIVITIES

- Contractor shall be responsible for the following preparatory activities:
- 1.2.1 Ensure equipment, materials, and personnel are ready for the execution of the work scope.
- 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 from obvious and known defects, malfunctions, and disrepair (e.g., oil leaks, broken and/or missing parts) upon arrival at the job site.

1.3 KNOWN CONDITIONS & HAZARDS

- Lead, Cadmium and Chromium Contamination is anticipated in existing painted surfaces. All painted surfaces shall be considered to contain lead, cadmium, and chromium particularly on surfaces (such as pipes) above 8 feet, and other surfaces where dust may accumulate. Materials containing lead, cadmium and chromium may be present, but not identified. Contact Buyer for direction before proceeding

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with work which could disturb lead, cadmium and chromium if not addressed in the work package.

- Radiological Contamination may be encountered in existing materials. Monitoring and removal of structures and materials containing radionuclides may be performed by the Contractor and others.
- Asbestos Contamination may be encountered in existing materials. Monitoring and removal of structures and materials containing asbestos may be performed by the Contractor.
- Beryllium Contamination may be encountered in existing materials. The 324 Building is considered a Beryllium Contaminated Facility. Monitoring and removal of structures and materials containing Beryllium may be performed by the Contractor.
- Heat Stress conditions potentially exist in the 324 Building when work activities are taking place.
- Polychlorinated biphenyls (PCBs) may be encountered in Motor Control Center MCC removal operation.
- Bio-Hazards and Vermin.
- Ergonomic Hazards.
- Noise Sources.
- Chemicals / chemical products.
- Uneven Walking Surfaces.
- Slips / Trips / Falls

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1.4 **SECURITY, BADGES, AND DOSIMETERS**

1.4.1 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).

1.4.2 Verification of Identity and Citizenship as of 10-9-2023

Identity and country of citizenship must be verified before issuing a security badge for physical access to the Hanford site and/or issuing a Logical Access Control System (LACS) card for logical access to the Hanford Local Area Network (HLAN). Foreign Nationals must go through the Foreign National Assignments (FNA) office to acquire physical/logical access. Contact the FNA office at ^Hanford FNVA with questions.

To verify identity, the applicant must present

- One form of acceptable photo identification from List A for a Physical Site Access credential.
- A secondary form of ID is required when Logical Access (HLAN) is needed. The secondary form of ID can be from List A or List B.

To verify citizenship, the applicant must present

- One form of acceptable identification highlighted below

Acceptable Forms of Identification for Access to the Hanford Site

List A: Acceptable Primary Forms of Photo Identification

NOTE 1: Original or certified copy of documents only. No expired or cancelled documents.

- Standard driver's license
- State-issued ID card
- Enhanced driver license
- U.S. passport (book or card)
- U.S. Military or a U.S. Military dependent's ID card

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- ID card issued by a U.S. government agency or entity, including
 - o Native American tribal ID,
 - o Transportation Worker ID Card (TWIC)
- PIV Badge (aka HSPD-12 badge)

List B: Acceptable Secondary Forms of Identification

NOTE: Original or certified copy of documents only. No expired or cancelled documents.

- U.S. Social Security Card
- Birth Certificate, Original or certified copy with seal, issued by a government entity (State, county, municipality, etc.) Note: Hospital birth certificates not allowed.
- ID card issued by a federal, state, or local government agency or entity
- Voter's registration card
- U.S. Coast Guard Merchant Mariner Card
- Certificate of U.S. Citizenship (Form N-560 or N-561)
- Certificate of Naturalization (Form N-550 or N-570)
- U.S. Citizen ID Card (Form I-197)
- Certification of Birth Abroad (Form FS-545 or FS-240)
- Certification of Report of Birth issued by the Department of State (Form DS-1350)
- Native American tribal document or ID card
- Record of Military Processing (Form DD-1966)
 - o Provided it reflects U.S. Citizenship

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Examples of Unacceptable Identity Source Documents

- Hospital birth certificates
- Student ID cards or school ID cards (including public/state universities, as well as private universities)
- Library cards
- Weapons permits
- License to Carry
- Hunting/Fishing permits
- Company ID cards
- Marriage licenses (acceptable as linking document, not as form of identification)
- Photocopies of documents that are not certified
- Notarized copies of documents
- Any expired or cancelled identity source documents

1.4.3 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 2 working days advanced notice is required for a Site badge. Contractor shall wear a Buyer-issued security badge identifying himself/herself.

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

1.5 **WORK HOURS**

1.5.1 Work will be done on a 4-10's schedule Monday through Thursday (4 working days per week). The standard workday shall consist of 10 hours of work between the core hours of 6:00 AM to 4:30 PM. No work occurs on Facility Closure Days. If schedule

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alternative is required, BTR will communicate with Contractor contact. (Facility closure days include - New Years Day; Presidents Day; Memorial Day; Independence Day; Labor Day; Eve of Thanksgiving; Thanksgiving Day; Christmas Eve; Christmas Day)

Radiological Work	Radiological Work Areas at 324 Building
5:45am to 6:00am	Ops Plan of the Day for scheduled work
6:05am to 6:30am	Ops resource assignments
6:30am to 7:00am	Pre-job briefing with work groups
7:00am to 7:30am	PPE issuance and dress in anti-contamination clothing
7:30am to 10:45am	Work ~3hrs 15mins
10:45am to 11:00am	Exit work area / zone. Survey and undress
11:00am to 11:30am	Lunch
11:30am to 12:00pm	PPE issuance and dress in anti-contamination clothing
12:00pm to 3:30pm	Work ~3hrs 30 min
3:30pm to 4:30pm	Exit work area / zone. Survey and undress. Post-job review with work groups.
Non-Radiological Work	Mockup and Non-Radiological Work Areas at 324 Building
5:45am to 6:00am	Ops Plan of the Day for scheduled work
6:05am to 6:30am	Ops resource assignments
6:30am to 7:00am	Contractor pre-job briefing
7:00am to 11:00am	Work
11:00am to 11:30am	Lunch
11:30am to 4:30pm	Work, exit

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Radiological Work	Radiological Work In 324 Airlock
5:45am to 6:00am	Ops Plan of the Day for scheduled work
6:05am to 6:30am	Ops resource assignments
6:30am to 7:00am	Pre-job briefing with work groups
7:00am to 7:30am	PPE issuance and dress in anti-contamination clothing
7:30am to 8:15am	Open cell door
8:15am to 10:30am	Work ~2hrs
10:30am to 11:00am	Close and secure cell doors. Exit work area / zone. Survey and undress
11:00am to 11:30am	Lunch
11:30am to 12:00pm	PPE issuance and dress in anti-contamination clothing
12:00pm to 12:45pm	Open cell door
12:45pm to 3:00pm	Work ~2hrs 15 min
3:00pm to 3:30pm	Close and secure cell doors. Clean area & prep.
3:30pm to 4:30pm	Exit work area / zone. Survey and undress. Post-job review with work groups.

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

1.6 **WORK MANAGEMENT REQUIREMENTS**

1.6.1 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.

1.6.2 Work control requirements:

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- Work shall be performed in accordance with existing Buyer-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.
- 1.6.3 The Contractor shall use the written work instructions provided by Buyer, which are written to guidelines described in CPCC-PRO-WKM-12115, “Work Management.” The Contractor and its lower-tiered subcontractors, which will be performing the work, shall support Buyer sponsored Team Work Planning (TWP) meetings. The planning meetings will be scheduled by Buyer planning department. The Contractor and/or its lower-tier subcontractors (or representatives) shall provide competent person(s) to support the preparation of all required work documents and shall actively participate in the planning and preparation of the work instructions, Team Work Planning (TWP) and Job Hazard Analysis (JHA) in accordance with CPCC-PRO-WKM-079, Job Hazard Analysis. These meetings will discuss work instruction planning scope, hazards and hazard mitigation and analysis preparation. Contractor shall have a representative from each building trades craft type that are performing the work.
- 1.6.4 The Contractor shall participate in Hazard Review Board (HRB) meetings per CPCC-CHRT-WKM-53060 when required. It is anticipated that all work packages for this scope will require HRB.
- 1.6.5 The result of the meetings will be the work instructions incorporated into JCS Work Package(s) that will describe the work scope, define required hazard mitigation, and include the necessary permits, hold points, inspection test reports, and associated project documentation needed to safely complete the work scope. The work instructions shall have sufficient detail to control the work so the work is performed safely and provides for required inspections and testing. Work Package(s) shall correspond with the project schedule activities.
- 1.6.6 Work scope that interfaces with, or modifies, any existing Structures, Systems, and Components (SSC’s) shall be performed following the preparation and approval of a Facility Modification Package (FMP) prepared by Buyer Engineering in accordance with CPCC-PRO-EN-2001. Typical work scope interfaces include, but are not limited to, electrical systems tie-ins, mechanical/structural system tie-ins, critical lifts, system testing, etc.
- 1.6.7 Changes to Contractor Work/Facility Work Package(s) and supporting documents shall be incorporated into the Work Package following the requirements of CPCC-PRO-WKM-12115, Work Management, and Work Change Notice (WCN) process. Allow 5 working days for processing work change notices.

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- 1.6.8 Daily release of work packages and approval to work shall be performed using the 324 daily release process.
- 1.6.9 Daily construction activity shall be coordinated with Buyer as identified in the General Provisions for Construction Services entitled “Technical Representative Responsibilities” and Contractor Work/Facility Work Package(s).
- 1.6.10 NOTE: The end-of-the-day meeting will be a Plan of the Day (POD) to plan the following day’s work activities. The POD is an in-person meeting every working day at 4:00 PM and shall be attended by a contractor representative. The BTR will provide call in information for those not able to attend in person.
- 1.6.11 Hazard Identification and Mitigation
- Contractor shall develop and maintain a work site Job Safety Analysis in accordance with CPCC-PRO-SH-40078 – Contractor Safety Processes, Appendix I – Job Hazard Analysis Process for Subcontractors

END OF SECTION

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SECTION 01110
OCCUPATIONAL SAFETY / INDUSTRIAL HYGIENE

PART 1 – GENERAL

1.1 REFERENCES

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

1.3 Code of Federal Regulations (CFR)

Department of Energy, Richland Operations (DOE-RL)

92-38 Hoisting and Rigging Manual

0359 Hanford Site Electrical Safety Program (HSESP)

1.4 Institute of Electrical and Electronics Engineers (IEEE)

C2 National Electrical Safety Code (NESC)

1.5 National Fire Protection Association (NFPA)

70-2023 National Electrical Code (NEC)

70E-2018 Standard for Electrical Safety in the Workplace

1.6 SUBMITTALS

1.6.1 See Section 01300 for the submittal process.

1.6.2 Approval Required

1.6.3 Safety and Health Program: CPCC-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 CPCC-PRO-SH-40078, Appendix F.

1.6.4 Designated Safety Representative: Provide name and resume of individual identified as the “Safety Officer” with proposal for Buyer acceptance as described in Section 01150. Contractor shall notify the Contract Specialist and BTR if the Designated Safety Representative changes and provide resume of replacement for approval as described in Section 01150.

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At CPCCo, Safety is no accident.
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- 1.6.5 Job Safety Analysis (JSA) / Job Hazard Analysis (JHA): Prior to onsite work, submit JSA/JHA identifying safety hazards as required by this Section.
- 1.6.6 Critical Lift Plan (DOE-RL-92-37): Required to minimize the possibility of equipment failure or human error to a hoisting or forklift operation involving a load that, if mishandled, poses unacceptable circumstances.
- 1.6.7 Approval Not Required: None
- 1.7 **SAFETY**
- 1.7.1 Contractor shall comply with the on-site provisions identified in SP-5 of the Contract.
- 1.7.2 Contractor shall perform weekly safety inspections and submit the safety inspection reports to the Buyer, weekly.
- 1.7.3 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.
- 1.7.4 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.
- 1.7.5 While working within a facility or remote area, Contractor shall participate in emergency drills. Exemptions may be requested by Contractor. **NOTE: It is anticipated that a minimum of one monthly drill will take place. Drill duration is approximately 2 hours.**
- 1.7.6 Contractor shall utilize gloves that are rated as ANSI Level 4, cut/puncture-resistant for all activities that present the potential for a cut or puncture to the hand. Leather gloves are not rated as cut/puncture-resistant and are not permitted. Contractors shall still use gloves (e.g., leather, canvas, cotton, etc. as appropriate for the work activity) to prevent and/or protect the hand from abrasions and contusions. Cut-resistant gloves come in different performance strengths; the Contractor needs to exercise the right amount of care to ensure they have selected the proper type of gloves for the hazard to be encountered. Buyer does not specify or recommend any brand-name gloves; but does require these gloves to be rated as cut/puncture resistant.
- 1.7.7 Contractor shall review the work scope, location, and hazards to determine if the activity is skill-based or beyond skill-based work (i.e., requires further analysis through a Job Hazard Analysis). Contractor per CPCC-PRO-WKM-079, shall ensure

SECTION 01110 OCCUPATIONAL SAFETY / INDUSTRIAL HYGIENE

that Contractor employee craft workers are, at a minimum, trained and qualified to the respective Craft Specific Hazard Analysis (CHA) for each craft listed and the controls associated with the CHA.

1.8 **ELECTRICAL SAFETY REQUIREMENTS**

1.8.1 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 C3 (NESC).

1.9 **HAZARD IDENTIFICATION**

1.9.1 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.

1.9.2 Prior to performing any other activities, Contractor shall submit a JSA/JHA for the construction activities to be performed.

1.9.3 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 the format provided by Buyer, and the Contractor shall submit a JSA/JHA for approval prior to work on each release.

1.10 **MEDICAL EXAMINATIONS**

1.10.1 **Medical examinations and Employee Job Task Analysis (EJTA) evaluation forms are required for Contractor personnel prior to starting work on the Hanford Site.** See SP-5. Personnel performing work that does not expose them to any chemical/physical hazard (as identified in CPCC-PRO-SH-40078) must still have an approved EJTA on file, even though no subsequent medical monitoring may be required.

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- 1.10.2 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.
- 1.10.3 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.
- 1.10.4 EJTA's drafted by the Contractor (form available at [Safety Reference Documents - Central Plateau Cleanup Company \(hanford.gov\)](http://hanford.gov)) shall be provided to the BTR for further development and approval by the Buyers Health and Safety professional. Approved EJTA's will be forwarded by the Buyer to the current Hanford Site Occupational Medical Provider for required medical examination(s) identification and scheduling.
- 1.10.5 **A completed Sub-Contractor New Hire Scheduling Form shall be provided to the BTR for Contractor personnel whose EJTA triggers required medical examination(s) and are not already in the Hanford Site Occupational Medical system. BTR will forward the form to the current Hanford Site Occupational Medical Provider.**
- 1.10.6 Contractor personnel performing work in radiation and/or contamination areas shall participate in all identified bioassay and body count requirements specified in the task specific Radiological Work Permit prior to and upon completion of work.

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. Contractor shall not be additionally compensated in terms of cost or schedule for weather-related shutdowns (Refer to Contract Part IV General Provisions, Paragraph 5.3 Delays – Force Majeure). 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

- The Contractor shall ensure that subcontractor personnel are apprised of the warnings and take the required actions as stated in CPCC-PRO-SH-28034 ADVERSE WEATHER [CPCC-PRO-SH-280341.pdf \(hanford.gov\)](#) for:
- Lightning Safety
- Wind Conditions
- Snow and Ice Safety
- Torrential Rain and Hail Safety
- Early Release Due to Adverse Weather

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 jobsite 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 the extent designated in this section. Referenced documents are those current as of the date of this section unless otherwise stated.

1.1.2 Code of Federal Regulations (CFR)

Title 10	Energy
Part 820	Procedural Rules for DOE Nuclear Activities
Part 830.122	Quality Assurance Criteria
Part 835	Occupational Radiation Protection
Title 29	Labor
Part 1910	Safety and Health Regulations for General Industry
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

1.1.3 Washington State Department of Ecology (Ecology)

State Waste Discharge Permit

1.1.4 National Fire Protection Association (NFPA)

30 Flammable and Combustible Liquids Code

1.1.5 Revised Code of Washington (RCW)

Title 46 Motor Vehicles

Chapter 46.11 Vehicle Licenses

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SECTION 01130
ENVIRONMENTAL, RADIOLOGICAL, AND NUCLEAR SAFETY

1.1.6 Environmental Management System: ISO 14001: 2015 (E)

1.2 **SUBMITTALS**

1.2.1 See Section 01300 for the submittal process.

1.2.2 Approval Required

1.2.3 Waste management information: 10 working days before starting work, submit a Waste Management Plan, in accordance with the Contract document Part IV, Special Provisions – Construction Contracts (SP-4) and Special Provisions – On-Site Services (SP-5), for managing waste generated during work.

1.2.4 Safety data sheets (SDS): 10 working days before starting work, or before any new chemical is brought onsite, submit SDS (with Hanford assigned SDS numbers) for hazardous chemicals (1.10.2). In addition, submit detailed information related to any anticipated process involving the application of volatile chemicals (use of a volatile cleaning agent, application of polyurethane coating, etc.) (1.10.3).

1.2.5 Chemical inventory: 8 working days before starting work and prior to bringing new chemicals on site, submit inventory of chemicals that will be brought to the worksite in accordance with SP-4, SP-5, and this Section. This includes inventory of any grout admixtures that will be brought to the worksite for use in grout mixing. Use Form A-6004-750, *Chemical Inventory Worksheet*, available at [Safety Reference Documents - Central Plateau Cleanup Company \(hanford.gov\)](#).

1.2.6 Air emissions: 8 working days before starting work and before bringing new air emission sources onsite, submit inventory of air emission sources to be used on Site (1.11).

1.2.7 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

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ENVIRONMENTAL, RADIOLOGICAL, AND NUCLEAR SAFETY

- 1.3.2 Material substitution: Minimize number of chemicals used to perform same or similar tasks. Where practical, replace hazardous materials with non-hazardous or less hazardous substitutes. Before substitution, obtain approval in accordance with Section 01630.
- 1.3.3 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.
- 1.3.4 Packaging: Minimize packaging brought on worksite. Whenever feasible, return empty containers to vendor.
- 1.3.5 Waste segregation: Separate wastes to avoid creating additional wastes and mixtures that cannot be recycled, or that may be more difficult to manage.
- 1.3.6 Process modification: Streamline processes for more efficient operation and less waste generation.
- 1.3.7 Reuse/Recycling: Ensure that materials are reused, if possible, rather than discarded as waste. Materials such as Batteries, bulbs, used oil, pallets, wood, metal, and electronics that cannot be reused, shall be recycled.
- 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, Contract document Part IV, Special Provisions – On Site Services (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**

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ENVIRONMENTAL, RADIOLOGICAL, AND NUCLEAR SAFETY

- 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 storage shall be in accordance with NFPA 30.
- 1.6 **DISPOSAL OF ASBESTOS**
- 1.6.1 Accumulate asbestos debris at the worksite, at approved locations, for disposal by Buyer.
- 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.
- 1.7.2 Notify Buyer at least 5 working days before the 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.
- 1.7.3 The 324 Building will perform waste load out and transportation including shipper support. The Contractor shall prepare waste (absorb, prep, bag, wrap, box) and provide details of any package for shipper to manifest in compliance with the Buyers procedures.
- 1.7.4 Upon notification by Contractor, Buyer will establish appropriate accumulation areas within worksite and select and provide labeled containers affixed with numbers. Contractor shall ensure personnel responsible for the accumulation areas are properly trained.
- 1.7.5 Separately accumulate waste from each waste stream in accordance with applicable federal, state, and local laws.
- 1.7.6 During spill cleanup and waste accumulation, cumulatively record waste inventory on Waste Inventory Sheet and Continuation Sheet (A-6003-706).
- 1.7.7 Containers are set up and managed by Buyer. Manage waste in accordance with SP-5.
- 1.7.8 Buyer will coordinate pick up and disposal of properly sealed dangerous waste after notification by Contractor.
- 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, CPCC-00175, and this Section.

SECTION 01130
ENVIRONMENTAL, RADIOLOGICAL, AND NUCLEAR SAFETY

- 1.8.2 Contractor shall not utilize vacuum trucks or HEPA-filtered vacuums or set up enclosures with exhausters 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 Commission (NRC) license or a license by an NRC-agreement state. Densitometers shall be checked daily with the facility Radiological Control Technician (RCT).
- 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 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 workday. 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 2 working 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.

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ENVIRONMENTAL, RADIOLOGICAL, AND NUCLEAR SAFETY

- 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 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 2 working 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 the Contract documents Part IV, Special Provisions – Construction Contracts (SP-4), SP-5, and CPCC-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).

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ENVIRONMENTAL, RADIOLOGICAL, AND NUCLEAR SAFETY

- 1.10.2 Safety Data Sheets (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 related to any anticipated process involving the application of volatile chemicals (e.g., use of a volatile cleaning agent, application of polyurethane coating, etc.).
- 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 hydrotesting, 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 300 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.
- 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).
 - f. Point source emissions (Non-road diesel engines)
- 1.11.2 Contractor shall take reasonable precautions to minimize fugitive dust during performance of this work.
- 1.11.3 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

SECTION 01130
ENVIRONMENTAL, RADIOLOGICAL, AND NUCLEAR SAFETY

internal combustion engines not used to propel the vehicle (e.g., mounted generator) shall be inventoried. Non-road internal combustion engines brought on-site shall be reported to the Buyers Environmental Compliance Officer for tracking purposes.

- 1.11.4 The Contractor shall comply with CPCC-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.

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 the extent designated in this section. Referenced documents are those current as of the date of this section unless otherwise stated.

1.1.2 Code of Federal Regulations (CFR)

Title 49	Transportation
Part 383	Commercial Driver’s License Standards
Part 390	Federal Motor Carrier Safety Regulations
Part 851	Worker Safety & Health Program (851.25)

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

92-36	Hoisting and Rigging Manual
0359	Hanford Site Electrical Safety Program (HSESP)
0336	Hanford Site Lockout/Tag-out
0346	Hanford Site Fall Protection Program (HSFPP)
0355	Hanford Standardized HAZWOPER Training

Washington Administrative Code (WAC)

Title 296	Department of Labor and Industries
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1.2 SUBMITTALS

1.2.1 See Section 01300 for the submittal process.

1.2.2 Approval Required

1.2.3 Training Matrix: Employee training is tailored to the work tasks performed by each employee. Contractor and Buyer will jointly develop a Training Matrix that covers all Contractor and Subcontractor workers by category and identifies the applicable training required for each category. Contractor shall submit the Training Matrix to the Buyer for approval. When the Contractor provides draft employee EJTAs to the BTR

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SECTION 01150 TRAINING AND QUALIFICATIONS

(see Section 01110, 1.4 Medical Examinations), the Contractor shall identify which Training Matrix category each employee falls into and the BTR will pass this information on to the Buyers training organization who will schedule training.

1.2.4 Approval Not Required

1.2.5 Hoisting and rigging: 30 calendar days after starting work, complete on-the-job-evaluation (OJE) required for hoisting and rigging operations as stated in 1.3.8.

1.3 **REQUIREMENTS**

1.3.1 General

1.3.2 Contractor is expected to provide appropriately trained and qualified staff to perform the type of work associated with their skill of craft (Electrician, Pipefitter, etc.) at the Hanford Site.

1.3.3 Any Contractor or Subcontractor operating a commercial motor vehicle (CMV) on the Hanford Site, requiring a DOT Commercial Driver's License (CDL), must be in full compliance with DOT Federal Motor Carrier Safety Regulations (FMCSR) at 49 CFR Parts 40, 382, 383, 385, 387, 390-397 and 399.

1.3.4 Personnel Qualification

Project Manager

- Must have Project Management Experience for Projects of similar type and complexity to this SOW. Minimum of 5 years of DOE Project Experience required.

On-Site Designated Safety Representative

- Must have a Construction Health and Safety Technician Certification or Occupational Health and Safety Technologist Certification by the Council on Certification of Health, Environmental and Safety Technologists, or be an Associate Safety Professional or a Certified Safety Professional from the American Board of Certified Safety Professionals.
- 10 years full time experience in a safety and health position in industrial safety, critical lifts and familiar with radiological contaminated materials and chemical and hazardous material handling experience.
- OSHA 10-hour Training is required.

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SECTION 01150 TRAINING AND QUALIFICATIONS

On-site Field Work Supervisor

- The Field Work Supervisor (FWS) shall be present during all craft work; the FWS & DSR shall be present on site daily for the pre-job meeting and for coordination while craft are performing work scopes.
- 10 years general construction experience.
- Contractors on site FWS shall be dedicated 100% to the project. The FWS will be based on site and will be a non-working FWS (not permitted to operate equipment, machinery or perform hands on craft duties).
- Contractor's proposed FWS must have prior working experience as a field superintendent with 15 years of mechanical and electrical background, be familiar with S&GO systems, and have demonstrable experience with complex critical lifts. Must have work experience that includes successful and satisfactory completion of a construction project within the past five (5) years that involved work under high hazard and radiological conditions in a nuclear environment.
- 5 years working at a Supervisory Level, which shall include labor management associated with bargaining units, or approved alternate credentials.
- Familiar with supervising work involving radiological contaminated materials and chemical and hazardous material handling experience.
- OSHA 10-hour training required.
- CPCCo FWS Qualification Card which shall be obtained and/or verified upon start of period of performance.

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

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

1.3.7 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.

1.3.8 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 approved by Buyer prior to training.

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

1.3.10 For previous training to be acceptable for Hanford Site qualification, documented evidence shall include type and class of equipment. For qualifications not related to

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SECTION 01150 TRAINING AND QUALIFICATIONS

equipment operation, personnel shall have documented evidence of training and experience related to an activity covered under this Contract.

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

1.4 SITE-REQUIRED TRAINING

1.4.1 CPCCo General Employee Training (CGET) and Hanford General Employee Training (HGET): Mandatory for all permanent badged Contractor and sub-tier Contractor personnel performing work on the Hanford Site. Previous HGET/CGET training within the past year may be acceptable.

1.4.2 Hanford Site Orientation (Course 100099): Mandatory for vendor and off-site subcontractors performing work on the Hanford Site under a temporary, visitor badge.

1.4.3 When performing work in a Buyer-designated operating nuclear facility, Contractor personnel shall receive all required Facility Emergency Hazard Identification Checklist (FEHIC) training, facility safety basis overview, and facility system overview prior to performing work.

1.4.4 When performing work in a Buyer-designated operating nuclear facility, Contractor personnel shall read and acknowledge understanding the 324 Facility Health and Safety Plan (HASP).

Qualification Training

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

Hoisting and Rigging

1.4.6 Hanford Site Hoisting and Rigging Manual (DOE-RL-92-36) provides qualification for rigging operations. The Contractor may submit employee record of equivalency (i.e., experience and union affiliation), but is required to pass a written or oral examination; operators of cranes, forklifts, and aerial lift personnel performing rigging activities shall also satisfactorily complete an OJE.

Note: Employee training is tailored to the work task performed by each employee. Contractor shall submit a training matrix to identify worker assignment and applicable training for each employee.

**SECTION 01150
TRAINING AND QUALIFICATIONS**

Hanford Course Number	Course Title	Off-site training acceptable (Yes / No)	Comments	Applicable to Contract (Yes / No)
000001	HGET – Hanford General Employee Training	N	<ul style="list-style-type: none"> 4 hours. 1 yr. retraining period. All Onsite CPCCo and Contractor Employees 	Y
000006	CPCCo-General Employee Training (CGET)	N	<ul style="list-style-type: none"> 4 hours. 1 yr. retraining period. All Onsite CPCCo and Contractor Employees 	Y
213007	Mockup FEHIC	N	<ul style="list-style-type: none"> 1 hour. 1 yr. retraining period. All Mockup workers Contractor Employees 	Y
324013	324 Building Safety Basis Training	N	<ul style="list-style-type: none"> 1 hour. 	Y
105896	324 Facility Orientation	N	<ul style="list-style-type: none"> 1 hour. 	Y
ASBESTOS				
02006L	Asbestos Awareness	Y	<ul style="list-style-type: none"> 3 hours. 1 yr. retraining period. Present certificate of completion or training record. 	Y
CONFINED SPACE WORK				
020134	Hanford Site Confined Procedure (HSCSP)	Y	<ul style="list-style-type: none"> 7 hours. Present certificate of completion or training record. 	N
CONSTRUCTION JOB SITE SAFETY INSPECTIONS				
600053	CPCCo Competent Person – Construction Job Site Safety Inspection	N	<ul style="list-style-type: none"> 2 hours. 	Y
026100	OSHA 10-Hour Health and Safety	Y	<ul style="list-style-type: none"> 10 hours. Required for Construction and Safety Supervisors. Present certificate of completion or training record. 	Y
DEMOLITION				

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**SECTION 01150
TRAINING AND QUALIFICATIONS**

Hanford Course Number	Course Title	Off-site training acceptable (Yes / No)	Comments	Applicable to Contract (Yes / No)
600055	CPCCo Competent Person - Demolition	N	<ul style="list-style-type: none"> • 2 hours. 	Y
ELECTRICAL SAFETY TRAINING				
044480	Electrical Safety for Non-Electrical Workers	Y	<ul style="list-style-type: none"> • 4 hours. • 3 yr. retraining period. • Equivalent – 044480. 	Y
043870	NFPA-70E Standards for Electrical Safety	Y	<ul style="list-style-type: none"> • 16 hours. • 3 yr. retraining period. • International Brotherhood of Electrical Workers class accepted; MSA Letter RML46000-09-06. • Present electrician license, journeyman card, certificate of completion or training record. 	Y
60038A/B	Electrician Qualification Verification Checklist	N	<ul style="list-style-type: none"> • 10 Hours 	Y
60039A/B	Instrument Specialist Qualification Verification Checklist	N	<ul style="list-style-type: none"> • 10 Hours 	Y
600330	CPCCo Qualified Electrical Supervisor Checklist	N	<ul style="list-style-type: none"> • 10 Hours 	Y
044483	Contact Release	N	<ul style="list-style-type: none"> • Annual retraining period 	Y
043698	RCW/WAC Code Update	N	<ul style="list-style-type: none"> • 3 yr. retraining period. 	Y
59	2023 NEC Code Update	N	<ul style="list-style-type: none"> • 3 yr. retraining period. 	Y
041680	Battery Safety	N	<ul style="list-style-type: none"> • 3 yr. retraining period. 	Y
044609	Capacitor Safety	N	<ul style="list-style-type: none"> • 3 yr. retraining period. 	Y
FACILITY SPECIFIC TRAINING				
03E500	Facility Emergency & Hazardous Info Checklist – FEHIC	N	<ul style="list-style-type: none"> • 1 hour. • 1 yr. retraining period. • All employees. • Equivalent – 03E049 and 03E093. 	Y

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**SECTION 01150
TRAINING AND QUALIFICATIONS**

Hanford Course Number	Course Title	Off-site training acceptable (Yes / No)	Comments	Applicable to Contract (Yes / No)
105896	324 Facility FEHIC - CBT	N	<ul style="list-style-type: none"> • 2 hours. • 1 yr. retraining period. • All 324 facility Employees/Contractors 	Y
038300	Building Administrator Training	N	<ul style="list-style-type: none"> • 4 hours 	Y
038301	Building Administrator Refresher (CBT)	N	<ul style="list-style-type: none"> • 1 hour 	Y
Required Reading	324 Facility Health and Safety Plan (HASP)	N	<ul style="list-style-type: none"> • ½ hour 	Y
FALL PROTECTION				
020147	Fall Hazard Awareness Training	N	<ul style="list-style-type: none"> • 3 hours 	Y
600058	CPCCo Competent Person – Fall Protection	N	<ul style="list-style-type: none"> • 2 hours. • Prerequisites 020147 and 020440 	Y
020440	Fall Protection PFAS Users	Y	<ul style="list-style-type: none"> • 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. 	Y
020441	Fall Protection PFAS Users Retaining	Y	<ul style="list-style-type: none"> • 4 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. 	Y
GENERAL SAFETY COURSES				

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**SECTION 01150
TRAINING AND QUALIFICATIONS**

Hanford Course Number	Course Title	Off-site training acceptable (Yes / No)	Comments	Applicable to Contract (Yes / No)
044400	Fire Watch Training	Y	<ul style="list-style-type: none"> • 3 hours. • 1 yr. retraining period. • Labors International Union of North America class accepted; MSA Letter RML46000-09-03. • Present journeyman card, certificate of completion or training record. 	Y
170500	Basic Medic First Aid/ CPR/AED	Y	<ul style="list-style-type: none"> • 8 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. 	Y
620193	Heat Stress Training – CBT	N	<ul style="list-style-type: none"> • 1 hour. • 2 yr. retraining period. • Present certificate of completion or training record. 	Y
600078	CPCCo Vehicle Spotter Awareness Training	N	<ul style="list-style-type: none"> • 1 hour. • Computer assisted. • Required for all vehicle and equipment operators. Does not qualify for Equipment Operation Near Power Lines. 	Y
HAZARDOUS WASTE WORK				
031420	3-Day Supervised Field Experience	N	<ul style="list-style-type: none"> • 24 hours. • Must complete a Hanford Site field experience. 	Y

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**SECTION 01150
TRAINING AND QUALIFICATIONS**

Hanford Course Number	Course Title	Off-site training acceptable (Yes / No)	Comments	Applicable to Contract (Yes / No)
031220	40-Hour Hazardous Waste Worker – Field	Y	<ul style="list-style-type: none"> • 40 hours. • 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. 	Y
032020	8-Hour Hazardous Waste Refresher	Y	<ul style="list-style-type: none"> • 8 hours. • 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. 	Y
031310	8-Hour Manager / Supervisor Hazardous Waste	Y	<ul style="list-style-type: none"> • 8 hours. • Training maintains a database of accepted vendors or other DOE sites. • Present certificate of completion or training record. 	Y
HEARING PROTECTION				
600059	CPCCo Competent Person – Hearing Protection	N	<ul style="list-style-type: none"> • 2 hours. 	Y
620194	Hearing Conservation - CBT	N	<ul style="list-style-type: none"> • 1 hour. • 1 yr. retraining period. • Present certificate of completion or training record. 	Y
HOISTING AND RIGGING WORK				
600054	Competent Person – Crane Inspector	Y	<ul style="list-style-type: none"> • 2 hours. • Prerequisites 043010, 042820, 042830 and 101100. 	Y
170664	Hoisting and Rigging Manual (DOE-RL-92-36) Overview	N	<ul style="list-style-type: none"> • 4 hours. • 5 yr. retraining period. • Equivalent to 040784 Basic Crane and Rigging Safety 	Y

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**SECTION 01150
TRAINING AND QUALIFICATIONS**

Hanford Course Number	Course Title	Off-site training acceptable (Yes / No)	Comments	Applicable to Contract (Yes / No)
042870	Equipment Custodian Training	Y	<ul style="list-style-type: none"> • 4 hours. • 5 yr. retraining period. • Present journeyman card, certificate of completion or training record. 	Y
040784	Basic Crane & Rigging Safety	Y	<ul style="list-style-type: none"> • 16 hours. • 5 yr. retraining period. • United Brotherhood of Carpenters class accepted; MSA Letter CPL600000-08-02. • Must complete a site specific examination. • Present journeyman card, certificate of completion or training record. • Equivalent to 040788 Basic Crane & Rigging Safety Challenge Examination 	Y
040786	Basic Crane & Rigging Safety Refresher	Y	<ul style="list-style-type: none"> • 6 hours. • 5 yr. Retraining period. • Equivalent to 040788 Basic Crane & Rigging Safety Challenge Examination 	Y
040788	Basic Crane & Rigging Safety Challenge Examination	N	<ul style="list-style-type: none"> • 1 hour. • 5 yr. retraining period. 	Y
044900	Critical and Special Lifts	Y	<ul style="list-style-type: none"> • 8 hours. • 5 yr. retraining period. • Prerequisite 040784. 	Y
042860	Incidental Rigging Activities (OJE)	N	<ul style="list-style-type: none"> • 3 hours. • 5 yr. retraining period. • Prerequisite 040784.- 	Y

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**SECTION 01150
TRAINING AND QUALIFICATIONS**

Hanford Course Number	Course Title	Off-site training acceptable (Yes / No)	Comments	Applicable to Contract (Yes / No)
042310	Advanced Rigging Techniques	Y	<ul style="list-style-type: none"> • 12 hours. • 5 yr. retraining period. • Prerequisite 040784. • Must complete a site specific examination. • Present journeyman card, certificate of completion or training record. • Equivalent to 042315 Advanced Rigging Techniques Challenge Examination 	Y
042315	Advanced Rigging Techniques Challenge Examination	Y	<ul style="list-style-type: none"> • 2 hours. • 5 yr. Retraining • Prerequisite 040784 	Y
042865	Advanced Rigging Activities On the Job Evaluation (OJE)	N	<ul style="list-style-type: none"> • 3 hours. • 5 yr. retraining period • Prerequisites 040784 and 042310. • Must complete a site specific OJE examination. 	Y
042820	Wire Rope/Rigging Hardware Inspection	Y	<ul style="list-style-type: none"> • 12 hours. • 5 yr. retraining period. • Prerequisite 040784. • Must complete a site specific examination. • Present journeyman card, certificate of completion or training record. 	Y
042822	Wire Rope/Rigging Hardware Inspection - Requalification	Y	<ul style="list-style-type: none"> • 5 hours. • 5 yr. retraining period. • Prerequisite 040784 and 042820 	Y
04469B	CLASS 1 Overhead Crane, Floor-Operated	N	<ul style="list-style-type: none"> • 3 hours. • 5 yr. retraining period. • Prerequisite:040784 	Y
	Below the Hook Lifting Device OJE	N	<ul style="list-style-type: none"> • Specific to the BTHLD 	Y
CRANES/RIGGING				

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**SECTION 01150
TRAINING AND QUALIFICATIONS**

Hanford Course Number	Course Title	Off-site training acceptable (Yes / No)	Comments	Applicable to Contract (Yes / No)
2321	Mobile Crane Operation and Setup	Y	<ul style="list-style-type: none"> • 4.5 hours. • 5 yr. retraining period. • Prerequisite 040784. • Must complete a site specific examination. • Present journeyman card, certificate of completion or training record. • Equivalent - NCCCO Mobile Crane Operator Certification • Equivalent - Mobile Crane Operation and Setup Challenge Exam 	Y
042322	Mobile Crane Operation and Setup Challenge Exam	N	<ul style="list-style-type: none"> • 2 hours. • 5 yr. retraining period. • Prerequisite 040784. • Must complete a site specific examination. 	Y
042327	Load Charts & Load Movement Indicators	Y	<ul style="list-style-type: none"> • 7 hours. • 5 yr. retraining period. • Prerequisite 040784. • Must complete a site specific examination. • Present journeyman card, certificate of completion or training record. • Equivalent – 042328 Load Charts & Load Movement Indicators Challenge Exam • Equivalent - NCCCO Mobile Crane Operator Certification 	Y
042328	Load Charts & Load Movement Indicators Challenge Exam	N	<ul style="list-style-type: none"> • 2 hours. • 5 yr. retraining period. • Prerequisite 040784 	Y

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**SECTION 01150
TRAINING AND QUALIFICATIONS**

Hanford Course Number	Course Title	Off-site training acceptable (Yes / No)	Comments	Applicable to Contract (Yes / No)
042930	Mobile Crane Inspection	Y	<ul style="list-style-type: none"> • 32 hours. • 5 yr. retraining period. • Prerequisite 040784 and 042820. • Must complete a site specific examination. • Present journeyman card, certificate of completion or training record. • Equivalent – Washington State Mobile Crane Certifier • Equivalent – Mobile crane Inspection Training, Industrial Training International 	Y
042932	Mobile Crane Inspection - Requalification	Y	<ul style="list-style-type: none"> • 4 hours. • 5 yr. retraining period. 	Y
044691 04469A 04469B 04469C	Class 1 Floor Operated Overhead Cranes (OJE)	N	<ul style="list-style-type: none"> • 3 hours. • 5 yr. retraining period. • Prerequisite 040784. <p>Must complete a Hanford Site specific OJE.</p>	Y
044621	Class 1 Lattice Boom Truck Mobile Crane (OJE)	N	<ul style="list-style-type: none"> • 3 hours. • 5 yr. retraining period. • Prerequisite 040784, 170661, 042327, 044605, and 042321. <p>Must complete a Hanford Site specific OJE.</p>	N
044623	Class 3 Small Telescopic Mobile Crane (OJE)	N	<ul style="list-style-type: none"> • 3 hours. • 5 yr. retraining period. • Prerequisite 040784, 170661, 042327, 044605, and 042321. • Must complete a Hanford Site specific OJE. 	y
044624	Class 4 Large Telescopic Mobile Crane (OJE)	N	<ul style="list-style-type: none"> • 3 hours. • 5 yr. retraining period. • Prerequisites 170661, 042317, 044605, 042321, 040784 • Complete a Hanford Site specific OJE. 	Y

**SECTION 01150
TRAINING AND QUALIFICATIONS**

Hanford Course Number	Course Title	Off-site training acceptable (Yes / No)	Comments	Applicable to Contract (Yes / No)
044652	Class 5 Commercial Truck – Mounted Crane – Telescoping Boom (OJE)	N	<ul style="list-style-type: none"> • 3 hours. • 5 yr. retraining period. • Prerequisite 040784, 170661, 042327, 044605, and 042321. 	Y
101100	Overhead Crane Manual / Electric Hoist Inspection	Y	<ul style="list-style-type: none"> • 6 hours. • 5 yr. retraining period. • Prerequisite 040784. • Must complete a site specific examination. • Present journeyman card, certificate of completion or training record. 	Y
FORKLIFTS				
044470	Forklift Operational Safety	Y	<ul style="list-style-type: none"> • 6 hours. • 3 yr. retraining period. • United Brotherhood of Carpenters class accepted; MSA Letter CPL600000-08-03. • Must complete a site specific examination. • Present journeyman card, certificate of completion or training record. 	Y
041890	Forklift Operator Challenge Examination	N	<ul style="list-style-type: none"> • 1 hour. • 3 yr. retraining period. 	Y
041885	Forklift Inspectors	Y	<ul style="list-style-type: none"> • 4 hours. • 5 yr. retraining period. • Must complete a site specific examination. • Present journeyman card, certificate of completion or training record. 	Y
044673	Forklift Class 4, 5, & 7 Operator Qualification (OJE)	N	<ul style="list-style-type: none"> • 3 hours. • 5 yr. retraining period. • Prerequisite 044470 • Complete a Hanford Site specific OJE. 	Y

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TRAINING AND QUALIFICATIONS**

Hanford Course Number	Course Title	Off-site training acceptable (Yes / No)	Comments	Applicable to Contract (Yes / No)
04467E	Class 6 Forklift - Electric & Internal Combustion Engine (OJE)	N	<ul style="list-style-type: none"> • 3 hours. • 3 yr. retraining period. • Prerequisite 044470. • Complete a Hanford Site specific OJE. 	Y
044676	Class 8 Forklift Operator Qualification (OJE)	N	<ul style="list-style-type: none"> • 3 hours. • 3 yr. retraining period. • Prerequisite 044470. • Complete a Hanford Site specific OJE. 	Y
LADDERS – PORTABLE				
600060	CPCCo Competent Person – Portable Ladder Inspector	N	<ul style="list-style-type: none"> • 2 hours. • Prerequisites 044392 and 044391 	Y
644391	Portable Ladder Safety - CBT	Y	<ul style="list-style-type: none"> • 1 hour. • Present certificate of completion or training record. 	Y
044392	Competent Person Portable Ladder Inspection - CBT	Y	<ul style="list-style-type: none"> • 1 hour. • Prerequisite – 044391. 	Y
LOCKOUT / TAGOUT				
00311I	Hanford Site Lockout/Tagout for Authorized Worker - Initial	N	<ul style="list-style-type: none"> • 8 hours. • 1 yr. retraining period. 	Y
00311R	Hanford Site Lockout/Tagout for Authorized Worker - Retraining	N	<ul style="list-style-type: none"> • 4 hours. • 1 yr. retraining period. 	Y
RADIOLOGICAL WORKER TRAINING				
020001	Radiological Worker II - Initial	Y	<ul style="list-style-type: none"> • 20 hours. • 2 yr. retraining period. 	Y
0200A1	Radiological Worker II – Initial Accelerated	N	<ul style="list-style-type: none"> • 5 hours. • 2 yr. retraining period. 	Y
020003	Radiological Worker II - Retraining	Y	<ul style="list-style-type: none"> • 5 hours. • 2 yr. retraining period. 	Y

RESPIRATORY PROTECTION

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

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020066	Respiratory Knowledge-Based Initial	Y	<ul style="list-style-type: none"> • 10 hours. • 1 yr. retraining period. • Present journeyman card, certificate of completion or training record. 	Y
020044	Quantitative Mask Fit	Y	<ul style="list-style-type: none"> • 1 hour. • 1 yr. retraining period. • Prerequisite 020066 • Present certificate of completion or training record. • Medical clearance through OMC. 	Y
020527 02R527 02I527	MSA Ultra Elite Air Purifying Respirator (APR)	Y	<ul style="list-style-type: none"> • 1 hour. • 1 yr. retraining period. • Prerequisite 020066 • Present certificate of completion or training record. • Medical clearance through OMC. 	Y
020525 02R525 02I525	MSA TL PAPR Face piece / Hood	Y	<ul style="list-style-type: none"> • 2 hours initial, 1 hour refresher. • 1 yr. retraining period. • Prerequisite 020066 • Present certificate of completion or training record. • Medical clearance through OMC. 	Y
020550 02R550 02I550	MSA TL PAPR Hood Only	Y	<ul style="list-style-type: none"> • 1 hour. • 1 yr. retraining period. • Prerequisite 020066 • Present certificate of completion or training record. • Medical clearance through OMC. 	Y Typically Used at 324 Bldg
004140	Beryllium Worker Training	N	<ul style="list-style-type: none"> • 4 hour • Medical clearance through OMC. 	Y
004150	Beryllium Worker Refresher	N	<ul style="list-style-type: none"> • 4 hour • Medical clearance through OMC. 	Y
SCAFFOLDING				
600062	CPCCo Competent Person - Scaffold	N	<ul style="list-style-type: none"> • 2 hours. • Prerequisites 044371, 044372 and 044373 	Y

**SECTION 01150
TRAINING AND QUALIFICATIONS**

044373	Scaffold Safety Erector/Dismantle	Y	<ul style="list-style-type: none"> • 8 hours. • Prerequisite – 044372. • Equivalent – 044370, 044388. • 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
044372	Scaffold Safety for Inspectors	Y	<ul style="list-style-type: none"> • 8 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
644371	Users Scaffold Safety - CBT	Y	<ul style="list-style-type: none"> • 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	N	<ul style="list-style-type: none"> • 8 hours. • 3 yr. retraining period. • Any person who will operate a CMV • Equivalent - 020084 	Y
050411	Load Securement for Drivers and Traffic Personnel	N	<ul style="list-style-type: none"> • 4 hours. • 3 yr. retraining period. • Equivalent 050410 	Y
QUALITY ASSURANCE TRAINING				
170720	Suspect Counterfeit Items	N	<ul style="list-style-type: none"> • 4 hours. • 1 yr. retraining period. 	Y

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**SECTION 01150
TRAINING AND QUALIFICATIONS**

END OF SECTION

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At CPCCo, Safety is no accident.
Grouting and Fixative System Installation and Stabilization of the 324 Facility

SECTION 01200 PROJECT MEETINGS

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 The purpose of the conference is familiarization of project participants with Hanford Site labor requirements. The 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 who have 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 include the following agenda.

- a. 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 Construction Progress Meetings

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PROJECT MEETINGS**

- b. Material and equipment lists
- c. Quality requirements
- d. Report requirements
- e. Safety
- f. Schedule requirements, schedule constraints, and work limitations
- g. Work delay notification process for Buyer
- h. Submittals
 - Construction Daily Activity Report (A-6004-822)
 - Change Form (A-6004-820)
 - Chemical Inventory Worksheet (A-6004-750)
 - Contractor Document Submittal Form (A-6004-757)
 - Request for Clarification or Information (RCI) (A-6004-833)
 - Craft-Specific Job Safety Analysis/Position Hazard Analysis (K-1 JSA/PHA) (A-6004-783)
 - Job Safety analysis/Activity Hazard Analysis (K-2 JSA/AHA) (A-6004-784)
 - Task-Specific Job Safety analysis (K-3 JSA) (A-6004-785)
 - Significant Discharge Log (A-6002-294)
 - Other Site Forms that may be reviewed at this meeting:

Form No.	Title
A. Form A-6005-436	Generator Initial Start-Up Checklist
B. Form A-6005-437	Hanford Generator Re-Start-Up Checklist
C. Form A-6004-929	Construction Completion Document
D. Form A-6004-590	Waste Planning Checklist
E. Form A-6004-952	Formal Pre-Job Briefing Checklist
F. Form A-6006-539	Construction Lost Time / Work Delay Notification
G. Form A-6004-286	Fall Protection Work Permit

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PROJECT MEETINGS**

H. Form A-6006-914	Mobile Equipment Daily Pre-Use Inspection Checklist
I. Form A-6006-916	Mobile Equipment Operation Worksite Pre-Use Checklist
L. Form A-6005-414	CPCC ERDF Container Verification Data Sheet

1.4 **CONSTRUCTION PROGRESS MEETINGS**

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

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

1.4.3 The purpose of the meetings is to exchange 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
- j. Resources
- k. Weekly labor reports

1.4.4 Contractor provides a 2-week look-ahead schedule for review during the meeting. Refer to Section 01315 for the level of detail required on 2-week look-ahead schedule.

1.4.5 The Contractor shall complete Construction Daily Activities Field Reports per CPCC-PRO-CN-14990 (A-6004-822) and Lost Time/Work Delay Notification (A-6006-539) if applicable. The Contractor shall provide Buyer with a Construction Daily Activities Field Report identifying detailed work activities performed for the day: craft by



SECTION 01200 PROJECT MEETINGS

name/hours worked and company, Supervision, by name/hours worked and company, any detailed problems/issues/delays, vehicles/equipment used, detailed work activities planned for the next day, Safety observations, Lost Time/Work Delay Block #14, etc. Construction Daily Activities Field Reports shall be submitted by Work Package to Buyer by 10:00 a.m. Monday each week, documenting the previous weeks activities. Daily Activity Reports will be filled out until the project is completed or terminated. A DAR will be submitted on working days when no work has been done.

END OF SECTION

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At CPCCo, Safety is no accident.
Grouting and Fixative System Installation and Stabilization of the 324 Facility

SECTION 01300 SUBMITTALS

PART 1 – GENERAL

1.1 SUMMARY

This Section provides the general procedures and requirements for preparing and processing submittals. Required submittals are identified in other Specification sections. Required submittals are also summarized by Buyer on the Master Submittal Register. 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 1 week, unless otherwise stated, 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) (available at <http://cpcco.hanford.gov/page.cfm/SubmittalsFormsDocs>). Instructions for completion of the submittal are included in the form.



SECTION 01300 SUBMITTALS

- 1.3.2 Buyers Document Management and Control System (DMCS) will be used to electronically manage document submittals and RCIs for this contract. The address to transmit submittals and RCIs to is PDCDC@rl.gov.
- 1.3.3 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.
- 1.3.4 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 5 working days from the disposition date.
- 1.3.5 Contact the BTR if additional submittal numbers are required.
- 1.3.6 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**
- 1.4.1 Contractor shall submit documents shown in section 01300A MASTER SUBMITTAL REGISTER.



**SECTION 01300A
MASTER SUBMITTAL REGISTER**

Submittal Register

The Contractor shall meet the required schedule and provide the documents specified in accordance with the following submittals.

Contract Number:					Revision: 0			
1. No.	2. Type, and Number of Copies	3. Technical Submittal	4. Vendor Information	5. Description / Document Title	6. Submittal Date CD – Calendar days WD – Working days	7. Approver Organizations	8. CPCCO Review Time (WD)	9. Contract Paragraph or Requirement Reference
100 – FIELD SUPPORT								
101	APW/E	N	N	Project Schedule	A + 12WD	PC	4WD	01315, 1.2.3
102	APW/E	N	N	Revised Schedule	Z	PC	4WD	01315, 1.2.4
103	APW/E	N	N	Project Manager Qualifications	A + 4WD	BTR	4WD	01150, 1.3.4
104	AP/E	N	N	Field Work Supervisor Qualifications	A + 4WD	SH	4WD	01150, 1.3.4
105	AP/E	N	N	Designated Safety Representative Qualifications	A + 4WD	SH	4WD	01150, 1.3.4
106	AP/E	N	N	Down Time Delay Report	Weekly	PC	4WD	01200, 1.4.5
107	AP/E	N	N	Progress Reports	Monthly	PC, BTR	4WD	01315, 1.2.6
108	AP/E	N	N	Weekly Labor Cost Reports	2 nd WD following week	PC	4WD	01315, 1.2.7

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Grouting and Fixative System Installation and Stabilization of the 324 Facility



**SECTION 01300A
MASTER SUBMITTAL REGISTER**

Contract Number:					Revision: 0			
1. No.	2. Type, and Number of Copies	3. Technical Submittal	4. Vendor Information	5. Description / Document Title	6. Submittal Date CD – Calendar days WD – Working days	7. Approver Organizations	8. CPCCO Review Time (WD)	9. Contract Paragraph or Requirement Reference
200 – SAFETY & HEALTH								
201	APW/E	N	N	Job Hazard/ Safety Analysis	A + 5WD	SH	4WD	01110, 1.6.5
202	APW/E	N	N	Safety Training Records	A + 5WD	SH	4WD	01150, Contract Training Table
203	APW/E	N	N	Designated Competent/Qualified Person For Scaffold	A + 10WD	SH	4WD	01150, Contract Training Table
204	APW/E	N	N	Designated Competent/Qualified Person For Fall Protection	A + 10WD	SH	4WD	01150, Contract Training Table
205	APW/E	N	N	Designated Competent/Qualified Person For Ladder	A + 10WD	SH	4WD	01150, Contract Training Table
206	APW/E	N	N	Employee Job Task Analysis	A + 10WD	SH	4WD	01110, 1.9.1, 1.9.2, 1.9.3
207	APW/E	N	N	Hoisting & Rigging Plans	Z	SH	4WD	DOE-RL-92-36
209	APW/E	N	N	Radioactive Sources	Prior to Source being brought on Site	IH, RC	4WD	01130, 1.8.3

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**SECTION 01300A
MASTER SUBMITTAL REGISTER**

Contract Number:					Revision: 0			
1. No.	2. Type, and Number of Copies	3. Technical Submittal	4. Vendor Information	5. Description / Document Title	6. Submittal Date CD – Calendar days WD – Working days	7. Approver Organizations	8. CPCCO Review Time (WD)	9. Contract Paragraph or Requirement Reference
210	AP/E	N	N	Weekly Safety Inspection Reports	Weekly	SH	4WD	01110, 1.7.2
300 – ENVIRONMENTAL/CHEMICAL/WASTE MANAGEMENT								
301	APW/E	N	N	Chemical Inventory Worksheet	A + 5WD	SH, EC	4WD	01130, 1.2.5
302	APW/E	N	N	Safety Data Sheets (SDSs)	U + 5WD	SH, EC	4WD	01130, 1.2.4
303	APW/E	N	N	Product Substitutions	Z	ENG	4WD	01630, 1.1.3
304	APW/E	N	N	Inventory Of Air Emission Sources	Prior to Source being brought on Site	IH, EC	4WD	01130, 1.2.6
305	APW/E	N	N	Volatile Chemicals Process	Z	SH, EC	4WD	01130, 1.10.3,
306	APW/E	N	N	Waste Management Information	SW + 5WD	SH, EC	4WD	01130, 1.2.3
400 – ENGINEERING								
401	APW/E	Y	N	Core Drilling Plan – All locations	A + 10WD	ENGR	4WD	01010, 1.2.4

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**SECTION 01300A
MASTER SUBMITTAL REGISTER**

Contract Number:					Revision: 0			
1. No.	2. Type, and Number of Copies	3. Technical Submittal	4. Vendor Information	5. Description / Document Title	6. Submittal Date CD – Calendar days WD – Working days	7. Approver Organizations	8. CPCCO Review Time (WD)	9. Contract Paragraph or Requirement Reference
402	APW/E	Y	N	Grout supply system – Description of system, installation plan and associated components	A + 20WD	ENGR	4WD	01010, 1.2.4
403	APW/E	Y	N	Fixative application system – Description of system, installation plan and associated components	A + 20WD	ENGR	4WD	01010, 1.2.4
404	APW/E	N	N	A-Cell door sealing plan and components	A + 20WD	ENGR	4WD	01010, 1.2.4
500 – QUALITY								
501	AP/E	N	N	Quality Assurance Program and Implementing Procedures	A + 5WD/ Z for revisions	QA	4WD	01400, 1.2.2
502	AP/E	N	N	Quality Assurance Qualifications	A + 5WD	QA	4WD	01400, 1.3.1
503	AP/E	N	N	Quality Control Qualifications	A + 5WD	QA	4WD	01400, 1.6.1
504	APW/E	Y	N	Inspection Test Reports	Z	QA	EC + 4WD	01040, 1.6.5

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**SECTION 01300A
MASTER SUBMITTAL REGISTER**

Contract Number:					Revision: 0			
1. No.	2. Type, and Number of Copies	3. Technical Submittal	4. Vendor Information	5. Description / Document Title	6. Submittal Date CD – Calendar days WD – Working days	7. Approver Organizations	8. CPCCO Review Time (WD)	9. Contract Paragraph or Requirement Reference
505	AP/E	N	N	Suspect Counterfeit Item Statement	With Shipment	QA	4WD	01400, 1.5
506	APW/E	Y	N	Field Quality Control Reports (Fabrication Travelers)	Prior to shipping	QA, ENG	4WD	01400, 1.6
500 - OTHER TECHNICAL SUBMITTALS								
507	APW/E	N	Y	NRMCA Certificate of Conformance	PW	QA, ENG	4WD	PRC-SRP-00216 5.5.4.a
508	APW/E	Y	N	Hydraulic Grout Testing and Quality Control Plan	PW	QA, ENG	4WD	PRC-SRP-00216 5.5.4c
509	AP/E	Y	Y	Laboratory Testing Reports	Completion + 8WD	QA, ENG	4WD	PRC-SRP-00216 5.5.4.d
510	AP/E	Y	N	Field Inspection and Testing Reports	Completion + 8WD	QA, ENG	4WD	PRC-SRP-00216 5.5.3
511	AP/E	Y	N	Engineering Scale Test Reports	Completion + 8WD	QA, ENG	4WD	PRC-SRP-00216 5.5.4.e

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**SECTION 01300A
MASTER SUBMITTAL REGISTER**

Contract Number:					Revision: 0			
1. No.	2. Type, and Number of Copies	3. Technical Submittal	4. Vendor Information	5. Description / Document Title	6. Submittal Date CD – Calendar days WD – Working days	7. Approver Organizations	8. CPCCO Review Time (WD)	9. Contract Paragraph or Requirement Reference
512	AP/E	Y	N	Break test results	Completion + 8WD	QA, ENG	4WD	PRC-SRP-00216 4.1
513	AP/E	N	Y	Batch/Trip Tickets	Completion + 8WD	QA, ENG	4WD	PRC-SRP-00216 5.5.4.h
514	APW/E	Y	N	Qualification of Hydraulic Grout Inspection/Testing Agency	PW	QA, ENG	4WD	PRC-SRP-00216 5.5.5
515	APW/E	Y	N	Qualification of Hydraulic Grout Inspectors	PW	QA, ENG	4WD	PRC-SRP-00216 5.5.5
600 - OTHER ADMINISTRATIVE SUBMITTALS								

- Typically a numerical sequence (i.e., 1, 2, 3,...). However, other numbering systems may also be used.
- 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):

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SECTION 01300A MASTER SUBMITTAL REGISTER

- DWG** An AutoCAD drawing using the Hanford standard formatting (See CPCCO-00263, *Off-Site Vendor Instructions for the Preparation and Control of Engineering Drawing*).
- MFC** Microsoft Format Compatible application (Word, Excel, Access, PowerPoint)
- P6** A Primavera Project Planner schedule
- GEN** General or Open Format/Media
- PDF** Adobe Acrobat (Portable Document Format)
- E** Electronic
- H#** Hardcopy reproducible to three (3) times

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 WD, Contract Completion +30 CD.

A Date of Award	U Prior to Use
NTP Notice to Proceed	FD Final Design Complete
CD Conceptual Design Complete	M Prior to Mobilization
PD Preliminary Design Complete	SC Start of Construction
PF Prior to Fabrication	EC End of Construction
PP Prior to Purchase	SC Per S/C Schedule
PS Prior to Shipment	Z As Required
PW Prior to Commencing Work	SW Ship Waste

7. Approver Organization. Examples are Construction Manager, Safety, Quality, Radiation Protection, Waste Management, etc.

BTR Buyer Technical Representative	PR Procurement
EC Environmental Compliance/EPL	QA Quality Assurance
ENG Engineering Services	RC RadCon
FP Fire Protection	SH Safety & Health
IH Industrial Hygiene	SME Subject Matter Expert
PC Project Controls	WM Waste Management

8. The number of Working Days required for review of the submittal.
9. Contract Reference: Cross reference to the Contract requirement that defines this submittal.

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**SECTION 01300A
MASTER SUBMITTAL REGISTER**

END OF SECTION

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Grouting and Fixative System Installation and Stabilization of the 324 Facility

SECTION 01315
PROJECT SCHEDULES, PROJECT CONTROLS,
AND PROJECT PERFORMANCE MILESTONES

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.

1.2 SUBMITTALS

1.2.1 See Section 01300 for submittal process.

1.2.2 Approval Required

1.2.3 Baseline Project Schedule: 12 working days after Notice of Award, submit a schedule covering activities for duration of Contract.

1.2.4 Weekly Work Schedules: Provide a 2-week "look ahead" schedule, updated weekly, one day prior to each scheduled Weekly Progress Meeting (1.5.1).

1.2.5 Revised Schedules: When required, submit revised project schedules as specified in 1.4.

1.2.6 Approval Not Required

1.2.7 Progress Reports: One month after submittal of project schedule, and monthly thereafter, submitting a progress report as specified in 1.6.

1.2.8 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

SECTION 01315
PROJECT SCHEDULES, PROJECT CONTROLS,
AND PROJECT PERFORMANCE MILESTONES

shall indicate employee names, company name, and hours worked for all people charging their time to the project.

1.3 **SCHEDULE PREPARATION**

The Contractor will provide the Buyer with a level 3 schedule consistent with the Grout and Fixative Delivery System design (Exhibit B) and Sequence of Work (Exhibit C). Each level 1 task shall include as a minimum the following level 2 activities

Task 1 Planning (Level 1)

- Project Execution Plan

Task 2 Fabrication

- Procure materials
- Procure fabrication subcontractor services (as required)
- Fabricate Grout Delivery system
- Fabricate Fixative Delivery system

Task 3 – Testing

- Core drill testing
- Fixative system testing
- Grout delivery system testing

Task 4 Installation

- Mobilization and Training of Craft
- Work Package Development
- Core Drilling
- Fixative System installation
- Grout Delivery system installation

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SECTION 01315
PROJECT SCHEDULES, PROJECT CONTROLS,
AND PROJECT PERFORMANCE MILESTONES

Task 5 -Operations

- Apply fixative
- Grout debris
- Grout floors
- Grout tanks
- Grout A Frame filters
- Seal Cells and Doors
- Grout vaults
- Demobilization

1.3.1 The schedule structure described above (levels 1,2,3) may be modified with Buyer approval.

1.3.2 The schedule submittal shall include a time-phased performance measurement baseline schedule (PMBS) for completing the statement of work.

1.3.3 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.

1.3.4 See submittal register for copy type to be submitted and approval code.

1.4 **SCHEDULE REVISIONS**

1.4.1 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).

1.4.2 Make schedule revisions in accordance with the following:

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

SECTION 01315
PROJECT SCHEDULES, PROJECT CONTROLS,
AND PROJECT PERFORMANCE MILESTONES

- 1.4.4 Identify activities modified since the previous submittal, major changes in scope, and other identifiable changes.
- 1.4.5 Provide a narrative report defining the problem areas, anticipated delays, and schedule impacts.
- 1.4.6 Describe corrective action taken, or proposed, and its effect, including changes in schedules of subcontractors.
- 1.4.7 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.
- 1.4.8 Upon approval, a revised schedule becomes the new baseline.
- 1.5 **WEEKLY WORK SCHEDULE PREPARATION**
- 1.5.1 Each week, prepare a detailed schedule of next 2 weeks work. Base weekly work schedules on the activity schedule. Electronic generation of these schedules is not required. Include the following:
- a. Work Description
 - b. Location of the Work.
 - c. Work involving outages, overtime, weekends, etc.
- 1.6 **PROGRESS REPORT PREPARATION**
- 1.6.1 Prepare a summary progress report for 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.
- 1.6.2 A variance analysis shall be prepared for 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.
- 1.6.3 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.
- 1.6.4 Report funds expended as both dollar amounts and percentages of budgeted totals for each activity shown on schedule, listing amounts for labor, equipment, and materials separately.

SECTION 01315
PROJECT SCHEDULES, PROJECT CONTROLS,
AND PROJECT PERFORMANCE MILESTONES

- 1.6.5 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.
- 1.6.6 Progress of scheduled activities will be used to determine monthly progress payments made to the Contractor. Requests for progress payments shall be directly related to progress shown in relation to the approved baseline project schedule.

END OF SECTION

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SECTION 01400
QUALITY ASSURANCE AND CONTROL

- 1.1.5 Department of Energy (DOE)
 - Process Guide Identification and Disposition of Suspect/Counterfeit items or Defective items
 - DOE-0359 Hanford Site Electrical Safety Program (HSESP)
- 1.1.6 Factory Mutual (FM)
 - Approval Guide
- 1.1.7 Institute of Electrical and Electronics Engineers (IEEE)
 - C2 National Electrical Safety Code (NESC)
- 1.1.8 International Standards Organization (ISO)
 - ISO 9000:2000 Quality Management and Quality Assurance Standards
- 1.1.9 Intertek Testing Services NA, Inc. (ITSNA)
 - ETL, Section 1 Electrical Products/Gas/Oil Fueled Products
- 1.1.10 National Electrical Manufacturers Association (NEMA)
 - MG-1 Motors and Generators
- 1.1.11 National Fire Protection Association (NFPA)
 - 70-2023 National Electrical Code (NEC)
- 1.1.12 Underwriters Laboratories (UL)
 - Electrical Appliance and Utilization Equipment Directory
 - Electrical Construction Materials Directory
- 1.2 **SUBMITTALS**
 - 1.2.1 See Section 01300 for submittal process.
 - 1.2.2 With proposal, submit a Quality Assurance Program (QAP) meeting the requirements of the Contract and this Section. Include subcontracted work and work performed off of the Hanford Site. If QAP is based on a consensus national standard or other quality

SECTION 01400 QUALITY ASSURANCE AND CONTROL

management system, furnish a matrix showing the cross-references between the QAP and the standard or system.

1.3 QUALITY ASSURANCE PROGRAM REQUIREMENTS

- 1.3.1 The Quality Assurance Program (QAP) requirements imposed by this Specification are under the authority of the Price Anderson Amendments Act (PAAA) of 1989. Quality assurance provisions are developed from U.S. Department of Energy Nuclear Safety Management Regulation 10 CFR 830.120. QAPs developed from other national standards (e.g., ASME NQA-1, 10 CFR 50, 10 CFR 72, ISO 9000, ASQ E4) may be used as a basis for satisfying the criteria specified and should be supplemented and submitted as necessary to satisfy the requirements.
- 1.3.2 The QAP shall apply to all activities, including subcontracted activities and for work performed off the Hanford Site. The QAP shall include provisions for the following:
- 1.3.3 Management: Program, training/qualification, discrepancy identification, document/records.
- a. Quality documents shall describe the organizational structure, functional responsibilities, levels of authority and interfaces for those managing and performing the Work.
 - b. 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.
 - c. Items and processes that do not meet the requirements shall be identified, controlled, and corrected. Identify items or materials that do not meet specified requirements and control them to prevent inadvertent use, shipment, or intermingling with acceptable materials or items.
 - d. Documents shall be prepared, reviewed, approved, issued, revised, and maintained. Approved and current issues of design documents, applicable submittals, procedures, procurement documents and instructions shall be used. Records shall be legible, identifiable, and retrievable.
 - e. Performance: Work Processes, Design, Procurement, Inspection, and Testing
 - a. Items shall be identified and controlled to ensure proper use. Items shall be maintained to prevent their damage, loss or deterioration.
 - b. Design work, including changes, shall incorporate applicable requirements and design bases, and be correctly translated into design outputs.

SECTION 01400 QUALITY ASSURANCE AND CONTROL

1. Design inputs and interfaces shall be identified and controlled.
 2. Changes to the approved design shall be justified and subjected to measures commensurate with the original design.
 3. For designs not previously proven, adequacy of design outputs shall be verified by individuals or groups other than those who performed the design. Minimum verification shall include a checking process.
- c. 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 (1.4.3).
- d. Contractor shall be responsible for the performance of all inspection and testing activities as specified in the Buyer Quality Assurance Inspection Plan. Inspection and testing of specified items and processes shall be conducted using established acceptance and performance criteria.
1. 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.
 2. 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.
 3. Complete required inspections and tests and have documentation available for review, before requesting overview inspection by Buyer.
 4. Measuring and Test Equipment (M&TE) shall be properly calibrated, maintained, accounted for, and used when required. Calibration shall be traceable to National Institutes of Standards and Technology Calibration (NIST) Standards. Perform calibration at specified intervals based on the type of equipment, required accuracy, and frequency of use, stability characteristics, and other conditions affecting performance. Maintain records and mark equipment to show calibration status.

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SECTION 01400 QUALITY ASSURANCE AND CONTROL

5. When M&TE is found to be out of calibration, specify means to identify its use since the last calibration and methods to re-verify acceptability of items previously tested.
6. Calibration shall have accuracy traceable to national standards (where they exist), and calibration standards shall have the accuracy to ensure that the M&TE has the required tolerances.

1.4 **ELECTRICAL/ELECTRONIC PRODUCT ACCEPTABILITY**

- 1.4.1 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.
- 1.4.2 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.
- 1.4.3 Electric motors shall be manufactured and tested 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.

1.5 **EXCLUDING SUSPECT AND MISREPRESENTED PRODUCTS**

- 1.5.1 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.
- 1.5.2 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

SECTION 01400 QUALITY ASSURANCE AND CONTROL

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.

- 1.5.3 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.
- 1.5.4 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: [Quality Assurance Program Guide — DOE Directives, Guidance, and Delegations](#)

1.6 **INSPECTION AND TESTING**

- 1.6.1 Inspection, testing, and documentation addressed under the Field Inspections and Test articles in this Statement of Work shall be performed by qualified Quality Control personnel who are independent of the work being performed. Quality Control personnel shall have been trained and qualified in accordance with the approved QAP.
- 1.6.2 Inspection and testing shall be performed in accordance with this Statement of Work.
- 1.6.3 Buyer may perform oversight and inspections to verify compliance with requirements.
- 1.6.4 Verifications shall be performed for specific verification points as scheduled in the Inspection Plan.
- 1.6.5 Prerequisites for verification points: Ensure that personnel have completed inspections of, and approved portions of, work in accordance with the Specification requirements before notifying Buyer.
- 1.6.6 Specific verification points are defined as follows:
- **QA Hold Point:** A type of signature step in a technical work document that satisfies established criteria for designation of Hold Points at which specific personnel are required to sign for the specified action. Hold Points consist of an

SECTION 01400 QUALITY ASSURANCE AND CONTROL

action; acceptance criteria for Hold Point completion; and blocks for signature of performer, printed name of performer, and date.

- **Verification Point:** A step in an inspection plan, procedure, or other work document that requires inspection personnel to review, inspect, test, check, or otherwise determine and document whether or not items, processes, services, or documents conform to specified requirements.
- **Witness Point:** A step in an inspection plan, procedure, or other work document that requires inspection personnel to observe an activity (e.g., examination or test).

NOTE: *"Verification" may be performed **after** the fact; "witness" is performed **during** the work process.*

- **Radiological Control Hold Point:** A hold point that is used when the potential exists in which incorrect implementation of radiological controls could exceed one or more of the following criteria:
 - Radiation exposures in excess of Administrative Control Levels
 - High airborne radioactivity concentrations without protection or controls
 - The uncontrolled release of radioactive contamination

1.7 **DEFICIENCY REPORTING**

- 1.7.1 Utilize a deficiency reporting system (e.g., nonconformance/deviation reports) to document deviations from requirements. Deficiency reports shall have a recommended disposition and shall be formally submitted to Buyer within 48 hours of discovery.
- 1.7.2 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.
- 1.7.3 Use-as-is and repair deficiencies shall be submitted for concurrence and approval. Reject and rework deficiencies shall be submitted for information. After the recommended disposition has been evaluated by Buyer, the form will be returned to the Contractor with a disposition of "approved" or "rejected." The Contractor shall take corrective action on the nonconformance only after the form is approved. The Contractor's completed nonconformance form shall be shipped with the affected item.

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- 1.7.4 Deficient items described by the report shall be physically tagged with a deficiency tag or segregated, when feasible.
- 1.7.5 Deficiency tagging shall remain intact during correction of deficient conditions, unless tagging inhibits directed corrective action. If removal of tag is necessary to accomplish directed corrective action, removal shall be performed or delegated by the initializing organization.
- 1.7.6 Clearance of deficiency tags shall be performed or delegated by the initializing organization.

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.

1.1.2 National Fire Protection Association (NFPA)

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

1.1.3 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 First Aid: Facilities for first line medical attention are available at 1979 Snyder St, Richland, WA 99354. Facilities for radiological decontamination are available at the 324 facility.

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

1.3 FIELD OFFICE

1.3.1 A Field Office/Trailer will be provided to the Contractor during the onsite Construction period.

1.3.2 If storage, Subcontractor office trailers and/or other facilities are required approval by the Buyer is required prior to mobilizing on site. Sufficiently anchor or tie down portable and re-locatable structures, including field building 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 calendar days after its arrival at the worksite.

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CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

- 1.3.3 Electric Power: In the event sufficient electrical power is not available for the Contractor's equipment at the Facility, the Contractor is required to provide a generator set for construction power.
- 1.3.4 Sanitary Facilities: Sanitary Facilities are available directly outside of the 324 facility as well as multiple restroom trailers located on the project site.
- 1.3.5 Telephone: Utilities for telephone service will be provided in the Buyer provided field office. Further telephone service other than that provided shall be the responsibility of the Contractor.
- 1.3.6 Water: Drinking water is not available. Contractor shall provide employees with adequate drinking water that meets health and safety requirements.
- 1.4 **TEMPORARY CONTROLS**
- 1.4.1 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.
- 1.4.2 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.
- 1.4.3 Vehicle and equipment movement
- a. Slow moving vehicles and equipment shall not travel on the Hanford Site roads during heavy traffic periods between 5:30 and 7:30 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 CPCC-PRO-SH-40078, Appendix F, shall have the extinguisher secured in an approved manner (vehicle mounting bracket designed for specific extinguisher, or stowed in a secured equipment container).
- 1.4.4 Traffic Control: Temporary traffic control and barricades shall be in accordance with WSDOT M 41-10, Section 1-07.23(3).

SECTION 01500
CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

- 1.4.5 Submit Traffic Control Plan for approval (Ref. Section 01010). Contractor plan shall minimize backing of all vehicles and equipment, include designated parking, designated walking and observation areas to minimize soft target and equipment/vehicle interface, control speeds, including signage and delineation, spotters, flaggers (if necessary), and other restrictions determined to support the Contractors means and methods.
- 1.4.6 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 20 feet or more from the road surface, or when a clearance of at least 6 feet cannot be maintained from overhead electrical or signal lines. Notify Buyer at least 3 working days before need. Contractor will not be charged for electrical escorts.
- 1.4.7 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

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SECTION 01610 MATERIAL AND EQUIPMENT DELIVERY, STORAGE, AND HANDLING

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 Safety Data Sheets (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 receiving inspections on delivered material in accordance with the requirements of Section 01400 (Quality Assurance and Control) and the Contractor's quality assurance program.

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, 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.

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MATERIAL AND EQUIPMENT
DELIVERY, STORAGE, AND HANDLING

- 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, chemical or laser 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.
- 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.

SECTION 01610
MATERIAL AND EQUIPMENT
DELIVERY, STORAGE, AND HANDLING

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

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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
- 1.1.3 Before starting Work or material delivery to the worksite, submit a Request for Clarification (RCI) form (A-6004-833) to Buyer for each requested substitution.
- 1.1.4 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:
 - 1.2.2 Substitution requires approval of a Change Form (A-6004-820) to the Contract Specialist and BTR if a cost change.
 - 1.2.3 Substitution shall be applied to the total quantity of the product required in the Statement of Work. Partial quantity substitutions are not acceptable.
 - 1.2.4 Approval of fabrication drawings and other design media does not constitute approval of substitute products identified within the media.
 - 1.2.5 Submittals required for a specified item are also required for an approved substitute.

1.3 CHANGE FORM PREPARATION

- 1.3.1 Using the RCI and/or 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.

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- 1.3.3 Provide an itemized comparison between the proposed substitute and the original specified product. Include the following information:
- 1.3.4 Applicable Statement of Work or Specification section and article or paragraph numbers or applicable Drawing number.
- 1.3.5 Quality and performance comparison. List variations.
- 1.3.6 Cost data. Show the net Contract price change.
- 1.3.7 List the availability of maintenance service and replacement materials.
- 1.3.8 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.

END OF SECTION

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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) and are also available on the Buyer web site at the following link:

<https://cpcco.hanford.gov/page.cfm/SafetyReferenceDocuments>

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 them 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.

1.3 ACTIVITY AND ADMINISTRATIVE DOCUMENTS

1.3.1 Deliver or retain in accordance with the following:

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- 1.3.2 Certified Payrolls: Deliver certified payrolls as required by the Contract Provisions to Buyer. Progress payments will not be processed unless certified payrolls for work periods have been received by Buyer. The process of reporting certified payrolls has been streamlined using an integrated electronic Certified Payroll submittal system, LCPtracker. LCPtracker eliminates the need for manual submittals and is capable of supporting integration from multiple payroll systems. All Certified Payrolls, including lower tier subcontractors, shall be submitted by entry into LCPtracker. Information can be found on LCPtracker's website: LCPtracker.com
- 1.3.3 Cumulative Hours: Each month, report the total cumulative hours worked for each Contract/Release. Report to include any subcontractor or vendor employees, including temporary or part-time workers, who have been compensated for specific work. Deliver report as early in the month as practical and deliver at the same time each month.
- 1.3.4 The Contractor shall complete Construction Daily Activities Field Reports (A-6004-822, Rev 3) and Lost Time/Work Delay Notification (A-6006-539 Rev.1) if applicable. The Contractor shall provide Buyer with a Construction Daily Activities Field Report identifying detailed work activities performed for the day: craft by name/hours worked and company, Supervision, by name/hours worked and company, any detailed problems/issues/delays, vehicles/equipment used, detailed work activities planned for the next day, Safety observations, Lost Time/Work Delay Block #14, etc. Construction Daily Activities Field Reports shall be submitted by Work Package to Buyer by 10:00 a.m. Monday each week documenting the previous work weeks activities. DAR's will be filled out until the project is completed or terminated. A DAR shall be submitted on working days where no work has been done.
- 1.3.5 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.
- 1.3.6 Subcontracting Plan Reports: Deliver reports to Buyer documenting conformance with the approved Subcontracting Plan, as required by SP-11.
- 1.3.7 Pre-Job Briefing Checklist: Prepare checklist during each pre-job briefing and post-job review. Deliver checklists to Buyer within 5 working days after briefing.
- 1.3.8 Pour Slips: After obtaining Buyer approval of Concrete Pour Slips, deliver copies to Buyer and retain Contractor copies until Contract closeout. After closeout, deliver to Buyer.
- 1.3.9 Trip Tickets: Deliver copies to Buyer with each truck load of concrete and retain Contractor copies until Contract closeout. After closeout, deliver to Buyer.

SECTION 01720
PROJECT RECORD DOCUMENTS

1.4 **CONSTRUCTION, QUALITY ASSURANCE AND SUPPORTING DOCUMENTS**

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

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

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

1.4.4 Leak/Pressure Testing Records: Deliver to Buyer one copy of records verifying acceptable completion of leak and pressure testing, within 5 working days after completion.

1.4.5 Calibration Records: Deliver to Buyer one copy of instrument calibration records 5 working days after Contract completion.

1.5 **PRODUCT SAMPLES AND MANUFACTURER'S INSTRUCTIONS**

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.

END OF SECTION