



STATEMENT OF WORK
100 Area Pump & Treat Facilities Chemicals

Part 1 Statement of Work for
Soil & Groundwater Operations
100 AREA PUMP & TREAT FACILITIES CHEMICALS
100 Area

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STATEMENT OF WORK

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1.0 INTRODUCTION / BACKGROUND

This Contract is issued for the performance of the 100 Area Pump and Treat (P&T) facilities in support of Central Plateau Cleanup Company (Buyer) work scope for the period (10-01-2021 to 09/30/2022). Buyer is a prime contractor to the Department of Energy (DOE) and all work on this Statement of Work shall be performed in support of the Buyer's contract with DOE.

This statement of work identifies the contractor's scope as it relates to the support of the 100DX, HX, KW, KX, KR-4 P&T facilities chemical treatment process.

Additionally specific unique work environment/conditions/circumstances which may be encountered during execution of the work scope include providing both chemicals for the facility on the same day, at the same time.

2.0 DESCRIPTION OF WORK – GENERAL

Contractor employee(s) shall be responsible for independently planning, organizing and performing a wide variety of non-hazardous specialized administrative/technical duties in support of the successful completion of goals and deliverables and in accordance with all provisions of the Contract.

Unless otherwise approved, the Contractor shall work in accordance with CPCCo contract requirements, operating policies and procedures and shall be responsible for execution of the work in accordance with the quality standards and requirements specified for assigned project and facility.

Specifically, CPCCo requires a Contractor to provide technical expertise and support for delivery of chemicals for the 100DX, HX, KW, KX, KR-4 Pump & Treat facilities.

The Contractor shall furnish all necessary labor, technical and professional services, supervision, materials, tools, equipment, consumables, and payment of any applicable taxes to perform all operations necessary and required to perform scope as directed by CPCCo.

3.0 DESCRIPTION OF WORK – SPECIFIC

The work products and services to be provided, including any specific CPCCo standards and requirements, required for the successful completion of this work activity. The Contractor will provide and deliver in a tanker truck:

- 93 wt% H₂SO₄ (Sulfuric Acid)
- 45 wt% NaOH (Caustic Soda)

3.1 Task Description

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

- Contractor shall provide the Buyer with chemical specification documentation and a chemical analysis for the product included in each shipment.

- Ensure equipment, materials, and personnel are ready for the execution of the applicable contract release.
- 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.
- Prior to Mobilization, submit all MSDS sheets and Chemical Inventory sheets for approval by CPCCo Facility Chemical Custodian.
- The Contractor shall mobilize required labor, equipment, and materials to the work site.
- Prior to start of work the Contractor shall demonstrate compliance with CPCCo Training Requirements in accordance with this SOW.
- Site Coordination and Interface Requirements including existing facilities, systems, features, and environmental conditions that the structure, systems and components must interface with.

3.2 Acceptance Criteria

Work products and services provided shall meet all applicable Buyer procedures for control and review of work products and pertinent regulatory requirements, as required by this Contract and incorporated provisions.

Further specific Acceptance Criteria applicable to this scope includes receipt and acceptance of Material Safety Data Sheets (MSDS) for each shipment and quality assurance sampling.

3.3 Special Requirements

- Delivery trucks are required for this work scope. 100 Area P&Ts require the smallest length truck and trailer available.
- Trucks should not have air pressure transfer pumps as primary means of transferring chemical.
- Transfer hose lines shall be free of obstruction and leaks. Extra hose sections available for use as needed.
- Delivery only in cool part of the day in summer months. Temperature < 80° F.

3.4 Sampling/Testing Requirements

The following QA tests shall be performed on a sample collected from every shipment of sulfuric acid and caustic and sampled for the below analytes at the detection levels listed. This is in addition to any COC's that may come with the material. Testing shall be performed by a lab accredited by the Washington State Department of Ecology or by the National Environmental Laboratory Accreditation Program using Method 3120 B or SM 3111 or equal, Standard Methods for the Examination of Water and Wastewater. Samples shall be collected before delivery and the results shall be provided within six weeks of delivery of the chemical to the BTR.

<u>Metal</u>	<u>Desired Detection Limit (mg/L)</u>
Antimony	0.10
Arsenic	0.10
Barium	0.05
Bismuth	0.005
Cadmium	0.05
Chromium	0.05
Copper	0.05
Iron	0.02
Lead	0.05
Manganese	0.05
Mercury	0.002
Nickel	0.10
Selenium	0.10
Zinc	0.05

Contractor Quality Control (QC) testing frequency shall be such that each lot, batch, or bulk amount of chemical shall be tested. Each lot, batch, formulation, etc. shall be assigned a unique identifier that matches it to the testing results and matches to individual totes or tank truck deliveries. The QC test results will be provided in advance of delivery in the form of a COA.

QC sampling for Sulfuric Acid

- Concentration of H₂SO₄ by titration (93 wt% minimum)

QC sampling for Caustic Soda

- Concentration of NaOH (44 - 46 wt%)

3.5 Organizational Interfaces

The Contractor shall interface with various Buyer (and other) organizations through the Buyer's Contract Specialist (or designee), as required.

3.6 Work Not Included

Work not included in this Contract includes any repairs/modifications or replacement of Contractor owned /leased equipment.

3.7 Materials and Equipment

Contractor is responsible for providing all equipment, tools, materials, supplies, and each and every item of expense. The following equipment and materials is a non-inclusive list:

- All industrial safety equipment for Contractor personnel (e.g., eye protection, hard hats, steel-toed footwear, gloves, face shields, splash protection).
- Appropriate hearing protection for all contractor personnel.
- Fire extinguishers.

- Cellular telephone or other communication device capable of initiating emergency notifications at remote work sites.
- All equipment required for the off-loading of bulk chemicals.

3.8 Delivery of Materials, Supplies, and Site Coordination Requirements

Regarding deliveries of materials and supplies, and the coordination of Subcontractors while on the CPCCo Site, the Contractor shall:

- Coordinate deliveries with BTR in advance.
- Arrange for badging through the Contract Specialist.
- Communicate any special hazards associated with the delivery or the work (e.g., safety, security)
- Meet the CPCCo contact at the designated rendezvous point. The individual designated to meet the Contractor is called the DPOC or POC (Delivery Point of Contact or Point of Contact).
- Comply with DPOC direction to the specified work location.
- Conduct a walk down of the work location with the DPOC upon request.

The DPOC will be physically present at the delivery site for the entire time a delivery or work is being executed to ensure that it is performed safely and in accordance with Contract requirements. Alternate arrangements may only be made with the approval and concurrence of the CPCCo BTR.

At completion of the delivery or work, delivery driver will exit the Site in a timely manner as directed by the DPOC.

Delivery tanker trucks and chemical totes are required for portions of this work scope. Other methods may be specified or approved by CPCCo on a case by case basis. Contractor personnel will be required to wear PPE during offloading operations as required by facility specific work packages.

4.0 TECHNICAL REQUIREMENTS

Contractor shall perform in accordance with the terms and conditions of this Contract, Buyer’s internal policies and procedures, and quality assurance provisions, including safety programs, laws, orders, permits, rules, confidentiality of information and intellectual property safeguards.

4.1 Procedures

The following latest version of the procedures included below, are hereby incorporated into and made a part of this SOW, as applicable. They shall have the same force and effect as if written into the body of the SOW.

DOE-0359	<i>Hanford Site Electrical Safety Program(HSESP)</i>
CPCC-PRO-SH-40078	<i>Appendix F, Safety Program</i>
CPCC-PRO-SH-40410	<i>Hazard Communication Program</i>

4.2 Electrical Safety Requirements

Services under the management of the Contractor shall be performed in accordance with *CPCCo-PRO-SH-40078 – Contractor Safety Processes, Appendix F – Safety Program Specifications for Contractors, Section 3.11*, which flows down the 10 CFR 851 and Hanford site requirements to the Contractor.

For the purpose of worker safety, electrical equipment must be per DOE -0359 Hanford Site *Electrical Safety Program Requirements*. Electrical equipment and industrial control panels delivered or brought on to the site in performance of the contract must be labeled by an organization currently recognized by OSHA as a Nationally Recognized Testing Laboratory (NRTL). All equipment installed as part of the contract must comply with the National Electric Code (NEC), NFPA 70 and, where applicable, ANSI C2 (NESC).

4.3 Fire Prevention Requirements

- A. All services under the management of the Contractor shall be performed in accordance with *CPCCo-PRO-SH-40078, Contractor Safety Processes, Appendix F*.
- B. All vehicles that require a portable fire extinguisher must be secured in an approved manner (vehicle mounting bracket designed for the specific extinguisher or stowed in a secured equipment container).
- C. In the case of a fire, immediately contact the Hanford Site Fire Department at 509-373-0911.

4.4 Transportation of Hazardous Materials

Requirements in the applicable sections of 49 CFR, parts 171-178 apply to transportation of a hazardous material in commerce and to each person who transports a hazardous material in commerce. Transportation of a hazardous material in commerce begins when a carrier takes physical possession of the hazardous material for the purpose of transporting it and continues until the package containing the hazardous material is delivered to the destination indicated on a shipping document. Transportation of a hazardous material in commerce includes the following:

- Movement of a hazardous material
- Loading of packaged or containerized hazardous material onto a transport vehicle
- Emptying a hazardous material from the bulk packaging after the hazardous material has been delivered to the consignee when performed by carrier personnel or in the presence of carrier personnel.
- Empty trucks of hazardous materials.

In addition, the carrier must also meet the Federal Motor Carrier Safety Regulations as prescribed by:

U.S Department of Transportation Federal Motor Carrier Safety Administration 49 CFR Parts 40, 303, 325,350-399.

4.5 Work Management Requirements

Work shall be performed in accordance with existing CPCCo procedures, policies, guidance documents, etc. No work shall be performed that is out of scope to the contract. If work is

determined to be out of scope or questionable, work shall be stopped, issue/concern defined and evaluated. Revision to contract shall be prepared.

Requirements for coordinating, scheduling, and releasing work will be determined and specified by the BTR, and (if any) the facility organization associated with the activity.

4.6 Cleaning, Cleanliness, and Foreign Material Exclusion Requirements

Contractor shall maintain cleanliness and foreign material exclusion by proper management of utilized materials to prevent intrusion of foreign materials. Contractor shall store and maintain materials, components, etc. in such a condition that damage is not encountered and meet manufacturer and CPCCo requirements.

5.0 PERSONNEL REQUIREMENTS

5.1 Training and Qualification

- A. Task specific or unique training or qualifications required for this task includes:
 - a. CPCCo General Employee Training (CGET) or Hanford Site Orientation.
 - b. Special hazard training (i.e., Hazardous Material Transportation)
- B. The Contractor is expected to provide appropriately trained and qualified staff to perform the type of work associated with their skill of craft at the Hanford site.
- C. Buyer will provide Contractor staff task or facility specific training as required for site and facility access and safe performance of assigned tasks.
- D. Testing requirements for personnel who will be working in substance Testing Designated Positions.

5.2 Security and Badging Requirements

For any on site work, general site access badging is required.

- Special clearance requirements will be provided, if applicable.

5.3 Site Access and Work Hours

Work shall be done on a 4 x 10 schedule. The standard workday shall consist of ten (10) hours of work between 6:30 AM and 5:00 PM, with one-half hour designated as an unpaid period for lunch. No work occurs on the non-working Fridays. If schedule alternative is required BTR will communicate to Contractor's contact.

6.0 ENVIRONMENTAL, SAFETY, HEALTH, AND QUALITY REQUIREMENTS

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 Environmental, Safety, Health, and Quality (ESH&Q) requirements of all applicable laws, regulations and directives.

Materials supplied or purchased for use in performance of this Contract, to the maximum extent practical, shall be environmentally preferred as described in 40 CFR 247 and including Biobased products as designated by the USDA. www.biopreferred.gov

The following project-specific ESH&Q requirements are applicable to this scope of work in addition to the requirements identified in the Contract [General Provisions](#) and, when work is being conducted on site, the additional ESH&Q requirements in [SP-5](#) (*Special Provisions – On Site Services*) shall be followed.

7.0 MEETINGS AND SUBMITTALS

7.1 Meetings

After contract award, the contractor shall participate in a Project Kickoff Meeting, which may be a conference call, an internet meeting, or a meeting to be held at CPCCo's Site. The time, date, and agenda for the meeting will be provided to the Contractor by CPCCo.

The Contractor shall interface with various CPCCo (and other) organizations through CPCCo's Contract Specialist (or designated BTR for in-scope work), as required, or at points and frequency determined by the Contract Specialist.

8.0 DELIVERABLES, PROJECT CONTROLS, MILESTONES, AND PERFORMANCE SCHEDULE REQUIREMENTS

8.1 Deliverables

Specific deliverables included:

- 93 wt% H₂SO₄ (Sulfuric Acid)
- 45 wt% NaOH (Sodium Hydroxide)