

**Statement of Work**  
**Industrial Process Water Treatment Supplies with Ion Exchange**

**1. Background:**

The Fleet Readiness Center Southeast (FRCSE) is an industrial facility that reworks, repairs, and overhauls various aircraft, engines, and components. In support of facility operations, FRCSE requires industrial process water of two types of water: 1) Industrial process recycled water (Non-Potable Water) and 2) Deionized water. Ion exchange water treatment services are required to produce these two types of water.

- **Industrial Process Recycle Water:** FRCSE requires an ion exchange water treatment that removes metals and other contaminants.
- **Deionized Water Services :** FRCSE requires ion exchange water treatment that removes ions in order to provide FRCSE with process water that meets the standards of the American Society For Testing and Material (ASTM) Type IV water per ASTM D 1193 (latest version).

**2. Scope:**

The contractor shall provide ion exchange and industrial water treatment tanks to FRCSE. The Contractor is responsible for providing all personnel, equipment, supplies, facilities, transportation, tools, materials, supervision, and other items necessary to provide ion exchange and industrial water treatment tanks. This includes pickup and delivery of ion exchange and/or activated carbon containers/tanks to ensure a reliable and continuous supply of industrial process water. The feed water for these systems will have traces of Resource Conservation and Recovery Act (RCRA) listed substances. As a result, RCRA regulatory rules shall apply.

**3. Recognized Holidays:**

The contractor shall not schedule delivery or pick up on the following federal holidays:

New Year's Day	Labor Day
Martian Luther King Jr's Birthday	Columbus Day
President's Day	Veteran's Day
Memorial Day	Thanksgiving Day
Independence Day	Christmas Day

**4. Hours of Operations:**

Delivery/pickup shall be conducted between the hours of 0700 AM to 1500 PM Monday thru Friday except federal holidays or when the Government facility is closed due to local or national emergencies, administrative closings, or Government directed closing.

**5. Place of Performance:**

See attachments:

Attachment B (Location/Quantity)

**6. Requirements:**

**6.1 The Industrial Process Recycled Water Treatment Service**

The contractor shall deliver portable tanks containing ion exchange resins and/or activated carbon to ensure continuous industrial process recycled water (non-potable water) per attachment B. The portable tanks shall meet the following process requirements and criteria:

- 6.1.1 The carbon, general resin and the Cation/Anion tanks
- a. Shall treat 50 - 75 gallons per minute (GPM) at approximately 50 pounds square inch (PSI) in the Treatment Plants.
  - b. This treatment configuration shall treat industrial process effluent water. The maximum limits of the industrial process effluent water to be treated are found in Attachment (A).
  - c. The effluent from this water treatment is utilized as industrial process recycled water (non-potable water). The maximum limits for non-potable water are found in Attachment (A).
- 6.1.2 The hexavalent chrome specific resin tanks shall treat industrial process waste water that contains hexavalent chrome at a concentration of 0-100mg/L.
- a. Building 780 shall treat 50 – 75 GPM at approximately 50 PSI.
  - b. Building 799 shall treat 2 - 10 GPM at approximately 30 – 50 PSI.
  - c. The concentration of hexavalent chrome in the effluent of these tanks shall meet the requirements for treatment of the carbon and general resins supplied by the contractor.
- 6.1.3 The cyanide specific resin beds shall treat industrial process waste water that contains of compounds of cyanide at a concentration of 0-100mg/L.
- a. The process shall treat at 1 - 3 GPM at approximately 30 – 50 PSI.
  - b. The concentration of cyanide in the effluent of these tanks shall meet the requirements for treatment of the carbon and general resins supplied by the contractor.
- 6.1.4 Industrial process deionized water shall meet ASTM Type IV deionized water in accordance with ASTM D1193 (latest version), Standard Specification for Reagent Water.

**6.2 Ion Exchange Water Treatment Service (IEWTS):**

6.2.1 The contractor shall furnish rental portable tanks at the locations described in attachment B. The tanks shall contain ion exchange resins and/or activated carbon to ensure a continuous supply of industrial process deionized water. Each tank shall be filled with resin or carbon to its design volume.

**6.3 Monitoring, Transportation and Logistics**

6.3.1 For each location, a conductivity meter shall be maintained at the system's connection point to the government's piping that indicates when the alarm set point is reached. The meter shall be checked for accuracy traceable to a National Institute of Standards (NIST) standard, approximately 20 -100 micro-siemens/cm. The meter shall be calibrated semi-annually and replaced as required.

6.3.2 The water treatment system shall incorporate monitoring / sampling ports at the system's connection point to the government's piping to facilitate monitoring of system performance and to estimate useful life of carbon and/or ion exchange resin/media.

6.3.3 The contractor shall provide connectors on their water treatment system bottles to allow connections to existing Government plumbing as directed by the Government point of contact (GPOC).

6.3.4 The contractor shall comply with all federal, state, and local regulatory requirements regarding:

- The proper handling, transportation and storage of bottles/tanks.
- Treatment and/or disposal of used carbon and/or resin media.
- Handling and disposal of the chemicals used to treat carbon and/or resin media

6.3.5 The contractor shall provide copies of all uniform hazardous waste manifests for all containers/tanks when removed from FRCSE to the (GPOC).

6.3.6 If samples of the water to be treated are required by the contractor, the contractor shall provide all necessary containers, manifests, handling and laboratory analysis.

6.3.7 The GPOC at each shop identified in Attachment (B) will be authorized to place a verbal request against this contract. Deliveries shall occur within 72 hours of request from designated GPOC.

6.3.8 The contractor shall provide a signed copy of the manifest for all containers/tanks at FRCSE NAS Jacksonville RCRA Part B Facility and manage all media waste in accordance with RCRA requirements. The contractor shall provide all certification / audit documentation to show proper management of all RCRA waste for the initial system to the Government and may be requested to provide certification / audit documentation of compliant facilities annually.

6.3.9 The contractor shall provide a copy of manifest and land disposal restriction paperwork for all portable containers/tanks to FRCSE Environmental and NAS Jacksonville RCRA Part B Facility (PWD) 48 hours prior to commencement of work to be performed. The contractor shall provide a certificate of recycling if applicable.

6.3.10 The contractor shall fill out the Resin Tank Usage Log (RTUL) attachment (D) and provide this log to the Government on a monthly schedule.

6.3.11 After contract award, the contractor shall conduct 60 and 180 day assessments of the service to determine whether services can be made more efficient or streamlined by using fewer or different size resin tanks. The results of this assessment (Hard Copy/Electronic) shall be delivered to the GPOC within 5 working days of the assessment

6.3.12 Four times per year the systems shall be checked for proper operation. This check shall include all components of the IEWTS and two parallel water softener systems.

6.3.13 The contractor shall be solely responsible for any and all spills or leaks during the performance of the contract that occur as a result of, or are contributed to by the actions of its agents, subcontractors and/or employees. The contractor shall clean up such spills or leaks to the satisfaction of the Government and in a manner that complies with applicable federal, state, and local laws and regulations. The cleanup shall be no cost to the government.

6.3.14 All contractor employees must be capable of obtaining legal access to FRCSE facilities and shall follow FRCSE work instruction (See Attachment C)

6.3.15 Some tanks are located on a part of the base known as the flight line. A special "Ramp Stamp License" is required to drive in those areas. A driver that the contractor uses to support the contract will require flight line access. The drivers shall attend and pass the "Ramp Stamp License" training class conducted by FRCSE. Training is conducted on a weekly basis in building 101 at FRCSE, NAS Jacksonville, and is two (2) hours in duration. Contractor drivers will not be authorized to drive on flight line until they have successfully completed this class. The class shall be successfully completed within ten (10) days after contract award.

## **7. Quality Assurance Provisions**

Ion exchange water treatment shall meet the American Society For Testing and Material (ASTM) Type IV water per ASTM D 1193 (latest version). Media waste disposal shall be fully compliant with the Resource Conversation and Recovery Act (RCRA).

**8. Period of Performance:**

Base: 1 – Aug – 2015 to 31 – Jul - 2016  
Option I: 1 – Aug – 2016 to 31 – Jul - 2017  
Option II: 1 – Aug – 2017 to 31 – Jul – 2018  
Option III: 1 – Aug – 2018 to 31 – Jul – 2019  
Option IV: 1 – Aug – 2019 to 31 – Jul - 2020

**9. Point of Contact:**

Primary:	Secondary:
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**Attachments:**

Attachment A (Maximum Limits for Industrial Process Recycled Water)  
Attachment B (Location and Quantity of Tanks)  
Attachment C (FRCSE Work Restrictions)  
Attachment D (Resin Tank Usage Log)