

## STATEMENT OF WORK (SOW)

1. Title of Project: Utility Plants Water Treatment Chemicals, Kerrville VA.

2. General: South Texas Veterans Health Care System in Kerrville Texas is seeking a full service and comprehensive chemical treatment program for the facilities cooling and boiler systems. This will be a firm-fixed price contract, with the contractor providing all labor, equipment, tools, materials, parts, supplies, software, transportation, supervision, and any other items and services necessary to accomplish the maintenance and products described herein.

- a. *Place of Performance:* Kerrville VA Hospital, 3600 memorial Blvd, Kerrville, TX 78028. All coordination will be made with the VA Engineering Office at Kerrville before work begins. Contractor shall check in daily upstairs Bldg 29, and utilize the Contractor's Sign-In Log. Work performed shall be between 0800-1630 daily, Monday – Friday, no holidays.

- **Contracting Officer Representative: Julian Torres**  
Phone: 830-370-6874  
Email: [Julian.Torres@va.gov](mailto:Julian.Torres@va.gov)

Site Visit: Scheduled for 20 April 2018 @ 1030.  
POC: Julian Torres  
830-370-6874  
3600 Memorial Blvd  
Building 29, 2<sup>nd</sup> floor  
Kerrville, TX 78028

<https://www.mapquest.com/directions/list/1/us/tx/kerrville/78028/3221-sidney-baker-st-30.069394,-99.112264/to/us/tx/kerrville/78028-7089/3600-highway-27-30.013676,-99.116579>

- b. Performance Period:

BASE PERIOD: TBD  
OPTION YEAR 1: TBD  
OPTION YEAR 2: TBD  
OPTION YEAR 3: TBD  
OPTION YEAR 4: TBD

3. Scope of Work: The contractor shall provide all resources necessary to accomplish the deliverables described in this statement of work (SOW), except as may otherwise be specified. The contractor shall provide a full service and comprehensive chemical treatment program for the facilities cooling and boiler systems. Contractor shall provide, monthly at a minimum, a service call to test water and make adjustment as necessary and be available for emergency type calls which may occur outside the monthly visit. The contractor shall also provide at this time the addition of any chemical to the bulk tanks or replacing of drums. Contractor shall provide their test chemicals for these services and keep testing parameters as follows:

### CONTROL PARAMETERS:

Boiler Plant SAMPLE	TEST	CONTROL RANGE
<i>Make-up (R/O)</i>	<i>Hardness</i>	<b>0 – 1 ppm</b>
<i>Boiler Feedwater</i>	<i>Hardness</i>	<b>0 – 1 ppm</b>

	<i>DEHA</i>	<b>300-500 ppb</b>
	<i>P &amp; M Alkalinity</i>	<i>As Measured</i>
	<i>Conductivity</i>	<i>As Measured</i>
<i>Boiler Water</i>	<i>P Alkalinity</i>	<b>300-600 ppm</b>
	<i>M Alkalinity</i>	<b>400-800 ppm</b>
	<b>PHOSPHATE</b>	<b>20-40 PPM</b>
	<i>Conductivity (Raw)</i>	<b>3000-4000 Us</b>
<i>Condensate</i>	<i>ph</i>	<b>8.2-8.6</b>
	<i>Hardness</i>	<b>0-1 ppm</b>
	<i>Conductivity</i>	<i>As measured</i>
<b>Cooling Tower Sample</b>	<b>TEST</b>	<b>CONTROL RANGE</b>
<i>Make-up</i>	<i>Hardness</i>	<b>100-400 ppm</b>
	<i>Conductivity</i>	<b>400-800</b>
<i>Cooling Towers</i>	<i>Hardness</i>	<b>500-1200 ppm</b>
	<i>Cycles</i>	<b>2-3</b>
	<i>PH</i>	<b>7.8-8.2</b>
	<i>P Alkalinity</i>	<b>0</b>
	<i>M Alkalinity</i>	<b>40-90 ppm</b>
	<i>Conductivity</i>	<b>1100-1400</b>
	<i>TI-120</i>	<b>.5-1 Mo+6</b>
<i>Hot Water Chill Water Loop</i>	<i>Conductivity</i>	<i>As Measured</i>
<i>Hot Water Nitrite</i>	<i>Nitrite level</i>	<b>Min. 800/As Measured</b>
<i>Chill Water Nitrite</i>	<i>Nitrite level</i>	<b>Min. 500/ As Measured</b>

*All areas listed below.*

#### **Boiler Plant:**

- Three “Vapor Power” steam generators rated at 8,400,000 BTU/H each. Average steam output is 60-65Klb/day or 21.9-23.7MMLBS/year.
- A de-aerator is in place with RO makeup. Condensate return is approximately 80-85 percent. The make-up rate is approximately 2800gpd.
- The current chemical program consists of an all Polymer internal treatment, DEHA and a Neutralizing amine.

Equipment includes three (3) chemical bulk tanks (double walled) and five (5) chemical metering pumps.

#### **Chiller Plant:**

- Two Trane 500-Ton centrifugal chillers

- Two EVAPCO Cooling Tower
- Heating hot water system
- Chill water closed loop and condenser water loop.
- The current chemical program consists of a scale and corrosion inhibitor, sulfuric acid, and a dual-biocide program consisting of an oxidizing biocide and a non-oxidizing biocide. A Nitrite treatment is used to treat the chill and hot water loops.

**Contractor shall conduct quarterly legionella testing on the chiller towers.**

All the services outlined below shall be provided by the contractor:

- Provide full service, including the *supply* and handling of all chemicals.
- Maintain all chemical feed equipment, including controllers, pumps, feed lines, etc.
- Review progress on the current program and make suggestions with detailed planning for improved alterations if necessary.
- Discuss any operating or water related questions or problems.
- Contractor shall conduct and document Legionella testing quarterly on the Cooling Towers
- Inspect any open systems. • Run tests on all pertinent samples from all treated systems.
- Submit a complete written report of all findings and recommendations.
- Provide comprehensive training to all pertinent staff at the beginning of the program, as well as any refresher type training or training on new product or materials.

*Documentation:* Contractor shall provide a complete detailed electronic report of all work performed and results. If additional work required, not covered by this contract, is discovered during the performance of this contract, the Contractor shall provide a detailed line-item proposal for the additional work.

*Submittals:* Contractor shall provide submittals on all proposed chemical used in the employment of this contract. Schedule and a Comprehensive Service Plan shall be submitted at the beginning of the contract period.

*Information Systems Officer, Information Protection:* The contractor will not have access to VA Desktop computers nor will they have access to online resources belonging to the government while conducting services.

*Privacy Officer:* The contractor will not have access to Patient Health Information (PHI) nor will they have the capability of accessing patient information during the services provided to the VA.

*Safety Requirements:* In the performance of this contract, the Contractor shall take such safety precautions as the Contracting Officer may determine to be reasonably necessary to protect the lives and health of occupants of the building. The Contracting Officer shall notify the Contractor of any safety issues and the action necessary to correct these issues. Such notice, when served to the Contractor or his representative at the work site shall be deemed sufficient for the corrective actions to be taken. If the Contractor fails or

refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work, and hold the Contractor in default.

Due to the nature of the contract the contractor shall provide their own Personal Protective Equipment (PPE). This should be appropriate for the work being done i.e. chemical handling and testing. The plants also have constant loud noise due to the equipment and hearing protection is required as part of the PPE.