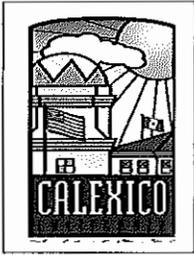


AGENDA
ITEM

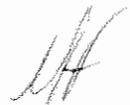
10



AGENDA STAFF REPORT

DATE: September 2, 2020

TO: Mayor and City Council

APPROVED BY: Miguel Figueroa, City Manager 

PREPARED BY: Lilliana Falomir, Public Works Manager – Administrative 

SUBJECT: Authorize City Manager to Purchase and Install PAX TRS Aeration System for the Eastside Water Reservoir from Utility Service Co., Inc. in the amount of \$212,588.00.

=====

Recommendation:

It is recommended that the City Council of the City of Calexico approve the following:

1. Authorize City Manager to Purchase and Install PAX TRS Aeration System for the Eastside Water Reservoir from Utility Service Co., Inc. in the amount of \$212,588.00.

Background:

The Water Treatment Plant routinely monitor for the presence of drinking water contaminants. Since the summer of 2019, testing results show that our water system exceeds the standard, or maximum contaminant level (MCL), for Total Trihalomethanes (TTHM). On November 7, 2019, January 21, 2020, April 17, 2020 and July 24, 2020, the City mailed out public notification to residents of the City of Calexico advising them that the City of Calexico Water Treatment Plant's water system recently exceeded drinking water standards for TTHM) and that the public was not at immediate risk.

The locational running annual average (LRAA) for TTHMs is determined by averaging all the quarterly samples collected at each sampling location for the past 12 months. The City of Calexico has 4 sampling stations. The LRAA standard for TTHMs is 80 ug/L. For example, during the 2nd quarter of 2020, the TTHM results increased due to a number of factors and ranged from 58 ug/L to 86 ug/L:

AGENDA ITEM 10

TTHM Location Running Annual Average (RAA) (ug/L)					
Location No.	Monitoring Location	2019		2020	
		3 rd Quarter	4 th Quarter	1 st Quarter	2 nd Quarter
3	Sereno Dr. and E. Rivera Ave.	75	76	74	66
4	Sapphire St. and Cantu Ave.	85	91	89	86
10	Sunset Ave. and Kloke Ave.	63	64	64	58
8	Cabana St. and Andrade Ave.	77	77	73	62

City staff has been working closely with the California State Water Resources Control Board, Division of Drinking Water to find feasible ways to implement several treatment options in order to meet TTHM standards

Discussion & Analysis:

One feasible way of removing trihalomethanes (THMs) from the Eastside Water Reservoir is to install PAX TRS aeration system. PAX TRS is a custom-designed, energy-optimized in-tank aeration system designed to remove THMs and is sold by Utility Service Co., Inc. City staff requested a proposal from Utility Service Co., Inc. and they are proposing to install the aeration system in two (2) phases:

Phase 1 will include:

- Upgrade Mixer to PWM600 230V three phase / 3 HP water-cooled motor powered by PAX control system
- Add Powervent PPV-600 230V 3-phase, 2 HP motor
- Add 2 EZ 24" vents

Phase 2 will include:

- Install Surface Aerator SA-150 480 VAC 3-Phase 15 HP stainless steel package NSF-61
- Washout and chemical clean of tank
- Inspect and repair any need coating

After carefully reviewing Utility Service Co., Inc. proposal, City staff is requesting that the City Council of the City of Calexico authorize the City Manager to purchase and install PAX TRS Aeration System at the Eastside Water Reservoir from Utility Service Co., Inc. in the amount of \$212,588.00. Please note that City staff has submitted all the required documentation to California State Water Resources Control Board, Division of Drinking Water. The purchase and installation of the PAX TRS aeration system will not proceed until it is approved by the California State Water Resources Control Board, Division of Drinking Water.

Fiscal Impact:

Capital Improvement Program Budgeted Item for FY 2020-2021
 Water Enterprise Fund No. 516-90-965-56014-000

\$212,588.00

Coordinated With:

Public Works Department.

Attachment:

1. Utility Service Co., Inc. Proposal dated Aug. 13, 2020.
2. City of Calexico Purchasing Policy and Procedures – Sole Source Purchases.
3. Sole Source Justification Form.



EASTSIDE WATER TANK TTHM'S REMOVAL PLAN

SUEZ

CA Department of Drinking Water approved THM removal system for water systems. PAX TRS Active mitigation of THM levels.

August 13, 2020

Jose Saldana
Water System Supervisor
City of Calexico
608 Heber Avenue
Calexico, CA 92231

RE: Trihalomethane Removal System (TRS) SFID 65691

Dear Mr. Saldana:

Suez is pleased to submit our TRS proposal SFID 65691 for the equipment, installation, and commission noted herein.

The PAX TRS™ is a custom-designed, energy-optimized in-tank aeration system designed to remove trihalomethanes (THMs) and other volatile compounds from drinking water. It is only offered by PSI Water Technologies, Inc., and installed only by Utility Service Group, Inc.

We have endeavored to provide complete information here, but if you have any questions, or require additional information please do not hesitate to contact me at 760-707-9091 at your convenience.

Sincerely,

Shailer Nicholas

Shailer Nicholas
Water System Consultant



Proposal From
UTILITY SERVICE CO., INC.
 535 Gen. Courtney Hodges Blvd · P O Box 1350 · Perry, GA 31069
 Toll-free: 855-526-4413 | Fax: 478-987-2991
 suez-na.com

Date: 8/12/20

Submitted by: **Shailer Nicholas**

Local Phone: **760-707-9091**

SFID: 65691

CN: 31649

SO: 62560

Proposal Submitted To: City of Calexico			Phone Number: 760-768-2177		Fax Number:	
Street Address: 608 Heber Avenue			Description of Work to be Performed: Trihalomethane Removal System (TRS)			
City: Calexico		State: CA	Zip Code: 92231		Tank Name: Eastside Reservoir	
Accounts Payable Contact Name:		Email:		Job Site Address: Cole Road, Calexico, CA 92231		
Job Contact (Inspection Reports):		Email:		County / Parish: Imperial	Tank Size: 6 MG	Tank Style: GST

Utility Service Co., Inc. agrees to provide all labor, equipment, and materials needed to complete the following:

1. Please see the Appendix for design criteria, system features, and advantages (Appendix A).
2. A date shall be coordinated by both parties for the Owner to give access to the tank.
3. SUEZ shall provide and install the following equipment and services. All equipment will be manufactured in accordance with our standard equipment.

Phase 1, as described on Pages 2-3	\$102,137.00
Phase 2, as described on Pages 4-5	\$110,451.00

(Scope of Work Continued on Page 2)

Please sign and date this proposal and fax one copy to our office.

Two Hundred Twelve Thousand Five Hundred Eighty-Eight and -----00/100 Dollars \$212,588.00

Payment to be made as follows: Payment in Full of Each Phase Upon Completion of Each Phase - plus all applicable taxes

Remittance Address: Utility Service Co., Inc., P O Box 207362 Dallas, TX 75320-7362

All material is guaranteed to be as specified. All work to be completed in a substantial workmanlike manner according to specifications submitted, per standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado and other necessary insurance. Our workers are fully covered by Workmen's Compensation Insurance.

Authorized
USCI Signature

Nichole Grasmac

Note: This proposal may be withdrawn by us if not accepted within Sixty (60) days.

Acceptance of Proposal - The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

Fiscal Yr Beginning Month _____

Signature _____

Date of Acceptance _____

Printed Name _____



Proposal From

UTILITY SERVICE CO., INC.

535 Gen. Courtney Hodges Blvd · P O Box 1350 · Perry, GA 31069

Toll-free: 855-526-4413 | Fax: 478-987-2991

suez-na.com

Utility Service Co., Inc. agrees to provide all labor, equipment, and materials needed to complete the following:

A. SCOPE OF SUPPLY BY SUEZ – PHASE 1: MIXER & POWERVENT

(Specific Descriptions of Items supplied in a separate document)

1. *PWM600 Mixer Wet Assembly
2. Control Center Dry Assembly with SCADA Compatability
3. Cable 130 feet
4. Tripod Assembly, PWM600
5. Long Bail Handle and Chain
6. Tank Penetration Accessory
7. Powervent®, PPV-600
8. Powervent®, Control Center with SCADA Compatability
9. Mixer Submittal
10. FOB Factory, Milpitas, CA with full freight allowed to Jobsite, City of Calexico, CA

*Note: Mixer given above is contingent upon the return of the existing PWM400 mixer and its control center to manufacturer.

B. SCOPE OF WORK BY SUEZ

1. Equipment unloading and installation.
2. Any structural work, related to installation.
3. Anchor bolts and seismic restraints that may be required for equipment.
4. Any electrical conduit runs, on the tank.
5. All electrical conduit, wiring, electrical material, etc. between control panel, SCADA, etc.
6. Any tank recoating services, labor, or parts associated with installation.
7. Any tank hatch or roof penetrations.
8. Any required custom curb for mounting Powervent®.
9. Installation inspection, system start-up, and operator training in Phase 1.

C. SCOPE OF WORK BY OTHERS

1. All civil works and concrete pad for equipment, if necessary.
2. Any underground work.
3. Electrical power to location of the control panels.
4. Any video recording.
5. All taxes, fees, lien waivers, bonds and licenses.
6. Any permitting or regulatory approvals.
7. Any items not explicitly listed under Scope of Work by Suez above.

D. DELIVERY

- Design Submittal: 4 - 6 Weeks After Receipt of Fully Executed Order
- Equipment Shipment: 8 - 12 Weeks After Approval of Submittals

E. WARRANTY

- The Warranty Period is 24 months for the PAX PWM600 mixer, including its associated controller, and 12 months for all other products.



APPENDIX A

Our proposal for Phase 1 for the Eastside Reservoir is based on the following design criteria:

Design Criteria

Tank Volume, gal	6,000,000
Reservoir Type	Above ground, steel
Tank Diameter, ft	182
Tank Height, ft	32
High Water Level, ft	29
Low Water Level, ft	8
Turnover, gpd	2,000,000

Equipment start-up will be provided by SUEZ and/or UGSI representative. A start-up checklist form will be provided.

A detailed scope of work and price for Phase 1 is listed on Page 2.

System Features & Advantages

1. An active mixing system to continuously circulate and homogenize the water inside the tank, eliminating chemical and thermal stratification and ensuring THM-laden water is continuously introduced to the transfer zone at the water surface.
2. An active ventilation system to continuously circulate fresh exterior air into the tank and providing force for mass transfer.

Based on the information provided in the table above that the tank has an average tank detention time of approximately 3 days. This elevated detention time is ideal for a mixer + Powervent® solution, as the lengthy detention time allows for the water to be turned over and exposed to the air-water interface many times before it exits the tank. This equipment combination allows water systems to use water age to their advantage, and is a real breakthrough in THM treatment technology. In addition to THM volatilization, adding a PAX mixer to a storage tank offers many advantages, including:

- Eliminates thermal stratification, short-circuiting and “dead zones”
- Eliminates chemical stratification and residual loss
- Lowers surface water temperature and combats biofilm growth
- Reduces variability in water taste and odor
- Reduces nitrification risk in chloraminated water systems
- Lowers rate of disinfection by-product (DBP) formation
- Delivered and installed quickly, with minimal construction and installation cost
- Proven track record supported by years of successful operational experience



Proposal From

UTILITY SERVICE CO., INC.

535 Gen. Courtney Hodges Blvd · P O Box 1350 · Perry, GA 31069

Toll-free: 855-526-4413 | Fax: 478-987-2991

suez-na.com

Utility Service Co., Inc. agrees to provide all labor, equipment, and materials needed to complete the following:

A. SCOPE OF SUPPLY BY SUEZ – PHASE 2: CHEMICAL CLEAN & AERATION

(Specific Descriptions of Items supplied in a separate document)

1. Surface Aerator, SA-150
2. Cable Mount System
3. TRS Submittal and Operation and Maintenance Manual
4. Manufacturer's Field Services – 1 Day at the Jobsite, in English only
5. FOB Factory, Milpitas, CA with full freight allowed to Jobsite, City of Calexico, CA

B. SCOPE OF WORK BY SUEZ

1. Equipment unloading and installation.
2. Washout and chemical clean.
3. Any structural work, related to installation.
4. Anchor bolts and seismic restraints that may be required for equipment.
5. Any electrical conduit runs, on the tank.
6. All electrical conduit, wiring, electrical material, etc. between control panel, SCADA, etc.
7. Any tank recoating services, labor, or parts associated with installation.
8. Any tank hatch or roof penetrations.
9. Installation inspection, system start-up, and operator training in Phase 2.

C. SCOPE OF WORK BY OTHERS

1. All civil works and concrete pad for equipment, if necessary.
2. Any underground work.
3. Electrical power to location of the control panels.
4. Any video recording.
5. All taxes, fees, lien waivers, bonds and licenses.
6. Any permitting or regulatory approvals.
7. Any items not explicitly listed under Scope of Work by Suez above.

D. DELIVERY

- Design Submittal: 4 - 6 Weeks After Receipt of Fully Executed Order
- Equipment Shipment: 8 - 12 Weeks After Approval of Submittals

E. WARRANTY

- The Warranty Period is 24 months for the PAX PWM600 mixer, including its associated controller, and 12 months for all other products.



APPENDIX A

Our proposal for Phase 2 for the Eastside Reservoir is based on the following design criteria:

Design Criteria

Tank Volume, gal	6,000,000
Reservoir Type	Above ground, steel
Tank Diameter, ft	182
Tank Height, ft	32
High Water Level, ft	29
Low Water Level, ft	8
Turnover, gpd	2,000,000
Operating Description	Steady-state
Target THM Removal Rate	30% (Phase 2 – Surface Aerator)

Equipment start-up will be provided by SUEZ and/or UGSI representative. A start-up checklist form will be provided.

A detailed scope of work and price for Phase 2 is listed on Page 4.

System Features & Advantages

1. An active mixing system to continuously circulate and homogenize the water inside the tank, eliminating chemical and thermal stratification and ensuring THM-laden water is continuously introduced to the transfer zone at the water surface.
2. An active ventilation system to continuously circulate fresh exterior air into the tank and providing force for mass transfer.
3. An active aeration system to increase the available surface area for mass transfer of THMs from the water to the air.

**SCOPE OF SUPPLY – TRIHALOMETHANE REMOVAL SYSTEM (TRS) –
CITY OF CALEXICO, CA**

PHASE 1: MIXER AND POWERVENT

<u>No</u>	<u>Item Description</u>	<u>Qty.</u>
1.	<p>*PWM600 Mixer Wet Assembly, including:</p> <ul style="list-style-type: none"> ▪ Stainless steel 316 impeller ▪ Passivated to minimize corrosion ▪ The ability to function continuously regardless of tank cycles ▪ 230V three phase 3 horsepower water-cooled motor powered by the PAX Control Center 	1
2.	<p>Control Center Dry Assembly with SCADA Compatibility, including:</p> <p>NEMA 4 Enclosure:</p> <ul style="list-style-type: none"> ▪ Lockable and weather resistant ▪ Overall weight of control center 70 lbs. ▪ Operating temperature range -4 °F to 129 °F (-20 °C to 55 °C) ▪ Green and Red LED Indicator lights to display motor status ▪ White LED Indicator light to display power ▪ Cooling fan <p>Motor Controller/VFD:</p> <ul style="list-style-type: none"> ▪ Allen Bradley ▪ 230VAC single phase, rated to 3.0 HP ▪ HOA Switches ▪ Manual speed control ▪ Thermal shut-off protection built-in ▪ Current overload protection built-in ▪ 300mA trip level GFCI ▪ Sine filter ▪ Branch-circuit protection <p>SCADA outputs included:</p> <ul style="list-style-type: none"> ▪ Digital Output signal indicating motor running ▪ Digital Output signal indicating fault ▪ Digital Input/Output signal for remote motor on/off ▪ RS-485 or Dry Contact connections ▪ 4-20mA signal 	1
3.	<p>Cable 130 ft., including:</p> <ul style="list-style-type: none"> ▪ Flat-jacketed 4 conductor ▪ Molded 3 wire pump plug 	1
4.	<p>Tripod Assembly, PWM600, including:</p> <ul style="list-style-type: none"> ▪ Stainless steel 316 legs ▪ Chlorine/chloramine resistant rubber foot pad to avoid scratching tank floor ▪ Stainless steel knobs for tool-less installation 	1

**SCOPE OF SUPPLY – TRIHALOMETHANE REMOVAL SYSTEM (TRS) –
CITY OF CALEXICO, CA**

PHASE 1: MIXER AND POWERVENT

<u>No</u>	<u>Item Description</u>	<u>Qty.</u>
5.	Long Bail Handle & Chain <ul style="list-style-type: none"> ▪ Stainless steel 316 handle to deploy mixer in full tanks 	1
6.	Tank Penetration Accessory <ul style="list-style-type: none"> ▪ Stainless steel strain relief for 4 wire flat-jacketed cable 	1
7.	Powervent®, PPV-600 <ul style="list-style-type: none"> ▪ Motor: Standard 230 VAC, 3-Phase, 60 Hz powered by Powervent® Control Center ▪ Power Switch: NEMA 1 safety disconnect switch ▪ Air Flow: 6,000 CFM at 0.5 in. wg static pressure ▪ Motor Power: 2 HP ▪ Nominal Power Draw: 1.21 kW ▪ Dimension (L x W x D): 61" x 61" x 34" ▪ Weight: 376 lbs. ▪ Roof opening: 29" x 29" ▪ Material: Heavy gauge powder-coated aluminum ▪ Filters: Standard one-inch 	1
8.	Powervent® Control Center with SCADA Compatibility, including: <p>NEMA 4 Enclosure:</p> <ul style="list-style-type: none"> ▪ Lockable and weather resistant ▪ Overall weight of control center 55 lbs. ▪ Operating temperature range -4 °F to 129 °F (-20 °C to 55 °C) ▪ Green and Red LED Indicator lights to display motor status ▪ White LED Indicator light to display power ▪ Cooling fan <p>Motor Controller/VFD:</p> <ul style="list-style-type: none"> ▪ Allen Bradley ▪ 230VAC single phase, rated to 3.0 HP ▪ HOA Switch ▪ Manual speed control ▪ Thermal shut-off protection built-in ▪ Current overload protection built-in ▪ 300mA trip level GFCI ▪ Sine filter ▪ Branch-circuit protection <p>SCADA outputs included:</p> <ul style="list-style-type: none"> ▪ Digital Output signal indicating motor running ▪ Digital Output signal indicating fault ▪ Digital Input/Output signal for remote motor on/off ▪ RS-485 or Dry Contact connections ▪ 4-20mA signal 	1

**SCOPE OF SUPPLY – TRIHALOMETHANE REMOVAL SYSTEM (TRS) –
CITY OF CALEXICO, CA**

PHASE 1: MIXER AND POWERVENT

<u>No</u>	<u>Item Description</u>	<u>Qty.</u>
9.	Mixer Submittal	1
10.	FOB Factory, Milpitas, CA with Full Freight Allowed to Jobsite, City of Calexico, CA	

**SCOPE OF SUPPLY – TRIHALOMETHANE REMOVAL SYSTEM (TRS) –
CITY OF CALEXICO, CA**

PHASE 2: CHEMICAL CLEAN AND AERATION

<u>No</u>	<u>Item Description</u>	<u>Qty.</u>
1.	Surface Aerator, SA-150 <ul style="list-style-type: none">▪ Power Supply Requirement: Standard 480 VAC, 3-Phase, 60 Hz powered by Integrated Control Panel▪ Motor Specification: 15 HP, 1800 RPM, premium efficient, TEFC, 1.15 service factor, Class H insulation, continuous duty, NEMA design B, 65°C ambient with normally closed thermostat and 115 V space heater and one-piece 316 SS motor shaft. Complete motor exterior, including motor housing, conduit box, fan and drop cover is 300 series stainless steel.▪ Cable Length: 50 ft▪ NSF-61 certified by UL▪ Float Material: 16-gauge 316 stainless steel▪ Minimum Hatch Clearance: 36" diameter▪ Weight – Power Section: 512 lbs.▪ Weight – Volute/Cone/Cross: 108 lbs.▪ Weight – Float Assembly (Complete): 392 lbs.▪ Weight – Reserve Buoyancy: 600 lbs.	1
2.	Cable Mount System <ul style="list-style-type: none">▪ Surface Aerator wet install kit to be installed by others in full tank using diver▪ Specification – System Mounting Bracket: 316 SS, .25" thick▪ Specification – Wire Rope: 316 SS, 3/8" diameter, 2,352 lbs. working capacity, 7x19 Class IWRC, RoHS compliant▪ Specification – Extension Spring: 302 SS, 2.1" outer diameter, 213.3 lbs. load capacity▪ Specification – Eyebolt: 4,000 lbs. vertical capacity▪ Specification – Turnbuckle: 316 SS, 2,200 lbs. work load limit▪ Specification – Strong-Grip Wire Rope Stud End Fitting: 316 SS, 5/8"-18 thread size for 3/8" rope, 3,000 lbs. work load limit	1
3.	TRS Submittal and Operation & Maintenance Manual as Follows <ul style="list-style-type: none">▪ Submittals: Qty. One (1) Sent Electronically▪ O&M Manual: Qty. One (1) Sent Electronically	
4.	Listed on next page	

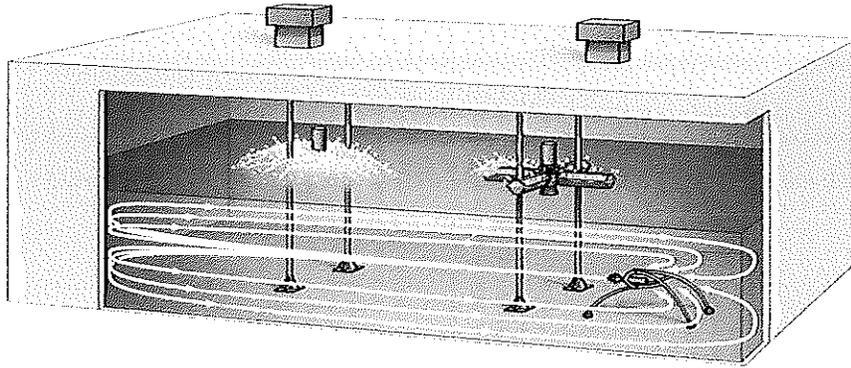
**SCOPE OF SUPPLY – TRIHALOMETHANE REMOVAL SYSTEM (TRS) –
CITY OF CALEXICO, CA**

PHASE 2: CHEMICAL CLEAN AND AERATION

<u>No</u>	<u>Item Description</u>	<u>Qty.</u>
4.	Manufacturer’s Field Services (1 Day(s) at the Jobsite) (in English only), including: <ul style="list-style-type: none">▪ Installation Inspection▪ System Start-Up▪ Operator Training	1
5.	FOB Factory, Milpitas, CA with Full Freight Allowed to Jobsite, City of Calexico, CA	

TRS PERFORMANCE GUARANTEE

**FOR
CITY OF CALEXICO, CA
6MG EAST RESERVOIR**

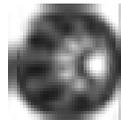


PSI Water Technologies, Inc. File No.: P20-4671
CA Contractor's License: #877235

Prepared on: July 17, 2020

SALES REPRESENTATIVE:

UGSI Solutions, Inc.
Kevin Sanner
550 Sycamore Dr
Milpitas, CA 95035
T: (310) 975-9719
Email: ksanner@ugsicorp.com



PSI Water Technologies

A UGSI SOLUTIONS COMPANY

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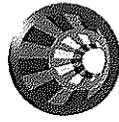
SECTION 1. TRS™ PERFORMANCE GUARANTEE
SECTION 2. MIXER PERFORMANCE GUARANTEE

IMPORTANT NOTICE: All the information in this Proposal or supplied in connection with this Proposal (including drawings, designs and specifications) (collectively, the "Information") is confidential and has been prepared for Buyer's use solely in considering the purchase of the goods and services described. Transmission of all or any part of this Proposal to others or use by Buyer for other purposes is unauthorized without Seller's advance written consent.

T: (408) 370-6540

M: ksanner@ugsicorp.com

W: 4psi.net



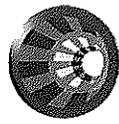
SECTION 1

**PSI WATER TECHNOLOGIES, INC.
TRS SYSTEMS PERFORMANCE GUARANTEE**

I. Performance Guarantee: PSI Water Technologies, Inc. (“PSI”) guarantees to the buyer or the initial end user (the “Customer”) of the Trihalomethane Reduction System supplied by PSI (the “PAX TRS”) that the PAX TRS will remove **30%** (the “Removal Rate”) of the trihalomethanes from the water within the tank or reservoir in which the PAX TRS is installed (the “Tank”) subject to each of the following conditions and exceptions (the “Performance Guarantee”):

A. Tank Parameters: The design of the PAX TRS and the Performance Guarantee are based on the following information relating to the nature and operation of the Tank, which the Customer certifies as accurate (the “Tank Parameters”). Accuracy of the Tank Parameters is a precondition to the Performance Guarantee. The Customer is responsible to maintain and supply complete and accurate records sufficient to demonstrate that the Tank is operated and maintained within the Tank Parameters throughout the period prior to and during the Performance Test (as defined below).

Tank Name	East Reservoir
Tank Type	Above ground, steel
Tank Volume [gal]	6,000,000
Tank Diameter [ft]	182
Tank Height (TH) [ft]	32
Overflow Elevation [ft]	29
Power Available (volts/phase/amps)	230-460VAC, 3Phase
Maximum Turnover [gpd]	2,000,000
High Water Level (HWL) [ft]	29
Low Water Level (LWL) [ft]	8
Tank Headspace [ft] (the distance between the tank ceiling and the HWL)	3



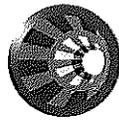
B. Other Conditions: The Performance Guarantee is subject to the following further conditions:

1. The PAX TRS shall have been configured, laid-out, and installed in accordance with a final design approved by PSI.
2. The Tank Parameters and any other design parameters or information provided to PSI by the Customer are accurate and complete.
3. All components of the PAX TRS shall have been handled, stored, installed, started up, maintained and operated in accordance with PSI's instructions and specifications (except to the extent that any of such activities is performed by PSI).
4. No person or entity ("Person") other than PAX or its designated contractor shall have serviced, modified, or removed from or added any component part to the PAX TRS without PSI's prior written approval.
5. Customer shall ensure that the PAX TRS and Tank operation, maintenance and performance data, including without limitation applicable Tank Parameters, are routinely and accurately recorded in a systematic format on a daily basis during the period prior to, and throughout, the Performance Test.

C. Exclusions: The Performance Guarantee does not cover and PSI will not be liable for any adverse effect on the Removal Rate caused by misuse, accident, casualty, tampering, weather or other acts of nature or any other factor beyond PSI's reasonable control.

II. Performance Testing: Testing to demonstrate that the PAX TRS meets the Performance Guarantee will be conducted in accordance with the procedure set forth below and in the performance testing plan referred to in paragraph D below, if applicable (collectively, the "Performance Test").

- A. The Customer shall be responsible for conducting the Performance Test in accordance with this Part II. The Customer will commence the Performance Test within **14 days** after startup of the PAX TRS. The Customer will give PSI at least five business days' prior notice of the dates on which the Performance Test will occur and will permit PSI to be present for all or any portion of such time as the Performance Test is being conducted.
- B. The trihalomethane ("THM") levels in the water samples collected for the Performance Test may be analyzed through the Customer's use of an appropriate field device supplied by PSI at PSI's expense or by an independent laboratory, at PSI's election. If PSI elects to supply a field device for this purpose, PSI will also train the Customer in the proper use of the device. If PSI elects to use an independent laboratory for this purpose, PSI will engage a qualified laboratory that is mutually acceptable to PAX and Customer to

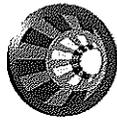


PSI Water Technologies

A UGSI SOLUTIONS COMPANY

perform such analysis. PSI will pay all costs of such laboratory analysis including the costs of containers, shipping, and laboratory fees. The laboratory will be instructed to analyze the samples in accordance with EPA METHOD 524.2. MEASUREMENT OF PURGEABLE ORGANIC COMPOUNDS IN WATER BY CAPILLARY COLUMN GAS CHROMATOGRAPHY/MASS SPECTROMETRY ("EPA Method 524.2").

- C. The Removal Rate will be measured and calculated based on the following procedure:
1. Measure THM levels in the Tank with the PAX TRS turned off.
 - a. Turn the PAX TRS off (the system must remain off during the entire period)
 - b. Wait **3 days**
 - c. Beginning on the **1 day** following system shut-off, take a sample of the water from the Tank sample station each day for a consecutive period of **3 days** at the same time of day (+/- 30 minutes) when the Tank is at the end of the drain cycle. Collect and store the samples in accordance with the procedures set forth in EPA Method 524.2. Mark the number, date and time of each sample on the sample container and in a Performance Test log to be maintained by the Customer (the "Performance Test Log"). If the Customer is analyzing the samples using a field device supplied by PSI, email to PSI (at PPAE@ugsicorp.com) on a daily basis the THM levels detected in each sample. If the samples are being analyzed by an independent laboratory, send all of the samples taken during the period the PAX TRS was shut off in a single shipment within 24 hours after the taking of the last of such samples.
 - d. Compute the average THM level with PAX TRS off by adding the measured THM levels in each of the samples taken while the PAX TRS is off and dividing the sum by the number of samples taken with the PAX TRS off. This result will be the *Average THM level with PAX TRS off*.
 2. Measure THM levels in the Tank with the PAX TRS turned on.
 - a. Turn the PAX TRS on (the system must remain on during the entire period)
 - b. Wait **3 days**
 - c. Beginning on the **1 day** following the turning on of the system, take a sample of the water from the Tank sample station each day for a consecutive period of **3 days** at the same time of day (+/- 30 minutes) when the Tank is at the end of the drain cycle. Collect and store the samples in accordance with the procedures set forth in EPA Method 524.2. Mark the number, date and time of each sample on the sample container and in the Performance Test Log. If the Customer is analyzing the samples using a field device supplied by PSI, email to PSI (at PPAE@ugsicorp.com) on a daily basis the THM levels detected in each sample. If the samples are being analyzed by an independent laboratory, send all of the samples taken during the period the PAX TRS was turned on in a single shipment within 24 hours after the taking of the last of such samples.
 - d. Compute the average THM level with the PAX TRS on by adding the measured THM levels in each of the samples taken while the PAX TRS is on and dividing the sum by the number of samples taken with the PAX TRS on. This result will be the *Average THM level with PAX TRS on*.



3. Monitor Tank conditions throughout the Performance Test to ensure operation within the Tank Parameters.
4. Calculate average percent removal as 1 minus the ratio of the Average THM level with PAX TRS on to the Average THM level with PAX TRS off.

$$\text{Average percent removal} = 1 - \frac{\text{Average THM level with PAX TRS on}}{\text{Average THM level with PAX TRS off}}$$

- D. If PSI determines that a more detailed or a modified performance testing plan is required to demonstrate compliance with the Performance Guarantee, PSI will prepare and submit such plan to the Customer for its review and approval within 60 days of the execution of a sales contract by PSI and the buyer of the PAX TRS. If the Customer disapproves of such plan, it will so notify PSI in writing, including the reasons for such disapproval, within 15 days after receipt of the plan. Customer will be deemed to have approved any plan as to which it fails to give such notice of disapproval within such period. Within 15 days of receiving a notice of disapproval of a plan, PSI will resubmit for the Customer's approval a revised plan including PSI's proposed resolution of the bases for Customer's disapproval of the original plan.

III. Passage/Failure of Performance Test

- A. If the average percent removal calculated as set forth in Part II is equal to or greater than the Removal Rate, the PAX TRS will have successfully passed the Performance Test, PSI will be deemed to have fully satisfied its obligations under the Performance Guarantee, and the PAX TRS will be accepted by the Customer with no further action required.
- B. If the average percent removal calculated as set forth in Part II is less than the Removal Rate for reasons other than failure of a condition or the applicability of an exclusion herein, the PAX TRS will have failed the Performance Test (a "Test Failure").
- C. If there is a failure of a condition herein or if an exclusion herein applies, the PAX TRS will be deemed to have successfully passed the Performance Test, PSI will be deemed to have fully satisfied its obligations under the Performance Guarantee, and the PAX TRS will be accepted by the Customer with no further action required.
- D. If there is a Test Failure, PSI shall make appropriate adjustments to the PAX TRS, including without limitation substitution or addition of equipment, prior to beginning a second performance testing sequence. If there is a second Test Failure, PSI will make further adjustments prior to beginning a third performance testing sequence.
- E. If there is a third Test Failure, then, as the sole remedy for failure to achieve the Performance Guarantee, either (i) PSI will remove the PAX TRS at its own cost and refund any portion of the purchase price theretofore paid to PSI for the PAX TRS, or (ii)



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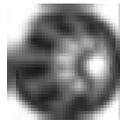
if the Customer would prefer to retain the PAX TRS despite such failure, PSI and the Customer will mutually agree on an appropriate price reduction based on the extent to which the average percent removal calculated as set forth in Part II fell short of the Removal Rate. If the parties are unable to agree to the amount of such reduction within 30 days after the third Test Failure, PSI will remove the PAX TRS at its own cost and refund the purchase price as provided in clause (i). Customer will give PSI full access to the Tank for purposes of removing the PAX TRS.

This document does not create any rights or obligations for any Person. To become effective, the Performance Guarantee, with such modifications as may be mutually agreed, must be included in a written contract executed by PSI and the buyer of the PAX TRS and will be subject to the terms and conditions set forth in such contract.

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PSI Water Technologies

A UGSI SOLUTIONS COMPANY

SECTION 2

**PSI WATER TECHNOLOGIES, INC.
PAX MIXER PERFORMANCE GUARANTEE**

1. PERFORMANCE

A. Mixing system shall completely mix reservoir according to the following minimum performance requirements. These requirements can be measured and validated after installation by operators with readily-available tools such as temperature probes and total chlorine grab samplers.

1. Temperature Uniformity

For tanks up to 12,000,000 gallons in volume: All temperatures shall converge to within 0.50°C (0.9°F) within 24 hours after mixer is installed and activated.

2. Disinfectant Residual Uniformity

For tanks up to 12,000,000 gallons in volume: Disinfectant residual within top five feet of tank and bottom five feet of tank will converge to within 0.20 ppm within 3 days after mixer is installed and activated. During continuous operation of the mixer, under normal disinfectant dosing parameters, disinfectant residual will converge to within 0.20 ppm at least once every 24 hours.

EXHIBIT "A"
CITY OF CALEXICO PURCHASING POLICY & PROCEDURES

the Finance Department. Departments shall submit in writing to the Finance Department any performance problem encountered immediately following the occurrence so that corrective action may be taken.

Contract Purchase Orders are annual and may include option for renewal for specific products, product types, or services at agreed upon prices or pricing structure and for a specified period of time.

Cooperative Purchases

The City may participate in purchases and contracts established by other political jurisdictions, provided the cooperative agreement is established following a competitive bid process. The City Manager may authorize the award of cooperative purchase agreements up to \$9,999,24,999. City Council approval is required for the award of any cooperative purchase of \$10,000,25,000 or more.

Sole Source Purchases

Commodities and services, which can be obtained from only one vendor, are exempt from competitive bidding. Sole source purchases may include proprietary items sold directly from the manufacturer, items that have only one distributor authorized to sell in this area or a certain product had been proven to be the only product that has proven to acceptable. All sole source purchases shall be supported by written documentation signed by the appropriate Department Head and forwarded to the Finance Department. The Finance Director or designee will make final determination that an item is a valid sole source purchase.

Urgency Purchases

An urgency is one where there is an unforeseen situation which requires immediate procurement of materials or services in order to continue operations of an essential department, or for the preservation of health, safety and welfare of the people, or protection of property, when there is a present, immediate and existing danger. A depletion of stock through normal routine usage is not considered an urgency item.

Urgency purchases may be made without competitive bidding when time is of the essence, and shall be made only for the following reasons:

1. to preserve or protect life, health or property; or
2. upon natural disaster; or
3. to forestall a shutdown of essential public services

Since urgency purchases do not normally provide the City an opportunity to obtain competitive quotes or properly encumber funds committed, sound judgment shall be used in keeping such order to an absolute minimum. In addition, the following requirements shall apply:

4. The Finance Department shall be contacted as soon as possible for an advance purchase order number, which may be given verbally to cover the

SINGLE/SOLE SOURCE JUSTIFICATION (SSJ)

This form must be used to show justification for a purchase from a single or sole source without open competition when the purchase is \$5,000 or above. The S. S. J. form is not to be utilized to circumvent normal purchasing procedure. It is to be used only as an exception when all attempts to pursue competitive purchasing practices have failed. Acceptance of this request will be at the discretion of the Finance Department and/or City Manager. Pricing is not a justification, by itself, for a single or sole source purchase; competitive pricing should be obtained for all purchases.

The following statements, in my professional judgment, are correct. I have researched the requirements to support these findings. I also certify that no personal advantage, gain or privilege has (or will) occur to me through the purchase from this vendor. I have reviewed the vendor's proposed costs and find those costs fair and reasonable for the technical effort proposed.

Department Head Name/Signature: Lilliana Falomir

Title: Public Works Manager – Administrative

Date: 09/02/2020 Phone: 760-768-2160

Email: falomirl@calexico.ca.gov

A. Compatibility to existing equipment, research, methodology, or training:

The Water Treatment Plant routinely monitor for the presence of drinking water contaminants. Since the summer of 2019, testing results show that our system exceeds the standard, or maximum contaminant level (MCL), for Total Trihalomethanes (TTHM). City staff has been working closely with the California State Water Resources Control Board, Division of Drinking Water to resolve the issue. One way of resolving the issue is to install equipment and perform the following maintenance at the Eastside Water Reservoir:

- Upgrade Mixer to PWM600 230V three phase / 3 HP water-cooled motor powered by PAX control system
- Add PowerventPPV-600 230V 3-phase, 2 HP motor
- Add 2 EZ 24" Vents
- Install Surface Aerator SA-150 480 VAC 3-Phase 15 HP stainless steel package NSF-61
- Washout/chemical clean of tank
- Inspect and repair any need coating

B. Only known manufacturer of this product:

Utility Service Co., Inc. is the only company that carries PAX TRS which is a custom-designed, energy-optimized in-tank aeration system designed to remove trihalomethanes (THMs).

C. Only product that will meet the requirements of the intended use although other like items exist:

Utility Service Co., Inc. is the only company that sells PAX TRS and has a subcontractor that can install the aeration system.

D. Regional Sales/Support/Service:

Utility Service Co., Inc. provides excellent sales and technical support services. In addition, the warranty period is 24 months for the PAX PWM600 mixer, including its associated controllers, and 12 months for all other products.

E. What are the consequences of not securing this specific item?

If the Water Treatment Plant is unable to purchase PAX TRS for the removal of trihalomethanes (THMs), the City will continue to have high levels of THMs and will be liable for possible violations/fines from the State Water Resources Control Board, Drinking Water Division.

F. Provide any additional information not furnished above that supports your specific requirements necessitating single/sole source purchase: