

**Request of Competitive Sealed Proposals
For Water Treatment Chemicals**



BID NO. RFP 21-22-02

DUE DATE: OCTOBER 25, 2021

**PURCHASING DEPARTMENT
401 N. PARK ST. GRANBURY,
TX 76048**

817.573.7030

purchasing@granbury.org



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• Aluminum Chlorohydrate 23% (ACH)	
• Sodium Hypochlorite 12.5% (NaOCl)	
• Liquid Ammonium Sulfate (LAS)	
• Sodium Hydroxide 25% (NaOH)	
• Hydrochloric Acid 15% (HCL)	
• Citric Acid 52%	
• Sodium Bisulfite 39% (SBS)	



**Invitation to Bid No. 21-22-02
Water Treatment Chemicals
Bid Closing Date: 10/25/2021**

**For Further Information Contact: Christy Russell, Purchasing Manager
Office Phone: (817) 573-573-7030**

INSTRUCTIONS TO BIDDERS:

Bids are solicited for furnishing the merchandise, supplies, services and/or equipment set forth in this solicitation. The City of Granbury will receive sealed Bids until 10:00 a.m. Central Standard Time, on October 25, 2021, at the Municipal Service Center. Bids will be publicly opened and read aloud at 10:00 a.m. Central Standard Time, on October 25, 2021, at the Municipal Service Center conference room.

The City of Granbury reserves the right to waive any informalities and to reject any or all bids. The award of contract will be made at a scheduled meeting of the Granbury City Council.

Bids shall be addressed to the Purchasing Department. Bids must be in a sealed envelope and have the bid number RFP 21-22-02, closing date and the company name clearly marked on the outside of the envelope.

Bids should be mailed or hand delivered to the following address:

**City of Granbury Municipal Service Center
Attn: Purchasing Department
401 N Park Street Granbury, Texas 76048**

Bids to be delivered by special courier (i.e. Federal Express, UPS, etc.) are to be marked "**BID MUST BE DELIVERED TO SERVICE CENTER BEFORE 10:00 a.m. Central Standard Time.**" Late bids will be returned; they will not be opened nor considered in the evaluation of the bid. Bids may be withdrawn at any time prior to the official opening. Bids may not be altered, amended or withdrawn after the official opening. The undersigned agrees, if the bid is accepted, to furnish any and all items upon with prices are offered, at the price(s) are upon the terms and conditions contained in the specifications. The period for acceptance of this bid will be 90 calendar days after the bid opening date unless the bidder submits a different date. (____days). I have read and agreed with the attached Terms and Conditions, Instruction to Bidders and the Invitation to Bid requirements. Failure to complete the requested information may result in rejection of your bid. Principal Place of Business (Defined as a least having one permanent active business office and employee located in Texas.

<i>Company Name</i>	<i>Company's Authorized Agent (Please Print Name)</i>
<i>Federal ID Number (TIN)</i>	<i>Title of Authorized Agent</i>
<i>Signature</i>	<i>Date</i>
<i>Fax Number</i>	<i>Telephone Number</i>
<i>E-Mail Address</i>	



SOLICITATION

Review of Documents: Bidders are expected to examine all documents that make up the Solicitation. Bidders shall promptly notify the City of any omission, ambiguity, inconsistency or error that they may discover upon examination of the Solicitation. Bidders must use a complete Solicitation to prepare Bids. The City assumes no responsibility for any errors or misrepresentations that result from the use of incomplete Solicitations.

Location of Documents: Solicitations are issued by the Purchasing Manager. The location and phone number for the Purchasing Manager are specified in the advertisement and in the solicitation.

EXPLANATIONS OR CLARIFICATIONS

Any explanation, clarification, or interpretation desired by a Bidder regarding any part of the Solicitation must be requested in writing from the Purchasing Manager with sufficient time allowed for a written addendum to reach each Bidder before the submission of their Bid. Interpretations, corrections, or changes to the Solicitation made in any other manner are not binding upon the City, and Bidders shall not rely upon such interpretations, corrections or changes. Oral explanations or instructions given before the award of the Contract are not binding.

Requests for explanations or clarifications may be e-mailed Purchasing Manager's office at (817) purchasing@granbury.org. The e-mail must clearly identify the Buyer's name and the Solicitation number. Any material information given to one Bidder concerning a Solicitation will be furnished by an Addendum to all Bidders who have been issued a Solicitation.

Unauthorized Communications: Bidders' contact regarding this Request for Proposal (RFP) with employees or officials of the City other than the Purchasing Manager. No officer, employee, agent or representative of the Respondent shall have any contact or discussion, verbal or written, with any members of the City Council, City staff or City's consultants, or directly or indirectly through others, seek to influence any City Council member, City staff, or City's consultants regarding any matters pertaining to this solicitation, except as herein provided. Any violation of this prohibition may result in the Respondent being disqualified from the procurement process. Any oral communications are considered unofficial and non-binding with regard to this RFP.

PRE-BID CONFERENCE

If a pre-bid conference is held, the time, place, and nature of the conference will be specified on the cover page of the solicitation. Attendance at pre-bid conferences is not mandatory.

PREPARATION OF BIDS

Each Bidder must furnish all information required by a Solicitation on the documents provided. Bids submitted on other than the forms included in the Solicitation shall be considered non-responsive. Any attempt to alter the wording in the Solicitation is ineffective and will result in rejection of the Bid.

Taxes: Purchases of Goods or Services for City use are usually exempt from City, State, and most Federal Taxes. Bids may not include exempted taxes. The successful Bidder should request a Tax Exemption Certificate from



the Purchasing Manager. Under no circumstances shall the City be liable to pay taxes for which the City has an exemption under any Contract.

Brand Name or Equal: If the Solicitation indicates brand name or "equal" products are acceptable, the Bidder may offer an "equal" product and must be prepared to demonstrate those features that render it equal. Final

determination of a product as "equal" remains with the City.

Delivery Time: Delivery time, if stated as a number of days, will be based on calendar days. Time is of the essence in any City purchase. If the indicated date cannot be met or the date is not indicated, the Bidder shall state its

best delivery time.

Free on Board (FOB) Point: Freight Terms shall be FOB Destination, Freight Prepaid and Allowed. The Bidder should quote its lowest and best price, with the goods delivered to the place specified, at the Bidder's expense and risk, and their tender delivery to the City. Bids offering any other delivery terms are not acceptable and may be cause for rejection.

Prices:

1. Bids shall be firm priced offers unless otherwise specified.
2. Pricing shall be entered on the Bid Sheet in ink.
3. Totals shall be entered in the "Total Price" column of the Bid Sheet.
4. In the event of a discrepancy between unit price and extended price, the unit price shall govern.
5. Prices shall be offered in the Dollars of the United States of America (or decimal fractions thereof).

Signature: The Bidder must sign each document in the Solicitation requiring a signature. Any change made to the Bid must be initialed by the Bidder.

Alternate Bids: Bidders may offer an "equal" product as an alternate bid. Final "approved equal" determination remains with the City.

Proprietary Information:

All material submitted to the City becomes public property and is subject to the Texas Open Records Act upon receipt. If a Bidder does not desire proprietary information in the bid to be disclosed, each page must be identified and marked proprietary at time of submittal. The City will, to the extent allowed by law, endeavor to protect such information from disclosure. The final decision as to information that must be disclosed lies with the Texas Attorney General.



Failure to identify proprietary information will result in all unmarked sections being deemed non-proprietary and available upon public request.

Bid Preparation Costs: All costs associated with preparing a Bid in response to a Solicitation shall be borne by the Bidder.

Payments: All payment terms shall be "Net 30 Days" unless otherwise specified in the bid document.

SUBMISSION OF BIDS

Copies: **Unless otherwise specified, Bidders are required to submit an executed original and one (1) copy of the Bid.**

Documents required with Bid: The following documents must be submitted with each Bid prior to the Due Date:

- Invitation to Bid;
- Bid Solicitation; and
- Reference Sheet

Addenda: Receipt of an Addendum must be acknowledged by signing and returning the Addendum with the Bid if requested or separately prior to the Due Date and Time. Addenda containing bid pricing should be returned in a sealed envelope marked on the outside with the Bidder's name, address, the Solicitation number, and the Due Date and time.

Late Bids: Bids must be received in the Municipal Service Center office prior to the Due Date and Time. All Bids received after the Due Date and Time are considered late and will be returned to the Bidder unopened. The time stamp clock on the receptionist's desk in the Municipal Service Center is the time of record. It is the sole responsibility of the Bidder to ensure timely delivery of the Bid. The City will not be responsible for failure of service on the part of the U.S. Postal Office, courier companies, or any other form of delivery service chosen by the Bidder.

MODIFICATION OR WITHDRAWAL OF BIDS

Modification of Bids: Bids may be modified in writing at any time prior to the Due Date.

Withdrawal of Bids: Bids may be withdrawn in writing, or by facsimile (provided that the facsimile is signed by the Bidder) at any time prior to the Due Date. A Bid may also be withdrawn in person by a Bidder, provided the withdrawal is made prior to the Due Date. A receipt of withdrawal must be signed by the Bidder. No Bids may be withdrawn after the Due Date without forfeiture of the Bid guarantee, unless there is a material error in the Bid. Withdrawn Bids may be resubmitted, with or without modifications, prior to the Due Date. The City may require proof of agency from the person withdrawing a bid.



OPENING OF BIDS

The Purchasing Manager representative responsible for opening Bids shall confirm the time and announce the Bid opening. The representative shall then personally and publicly open all Bids timely received, reading each bid aloud.

EVALUATION FACTORS AND AWARD

Evaluation: Bidders may furnish pricing for all or any portion of the Solicitation (unless otherwise specified). However, the City may evaluate and award the Contract for any item or group of items shown on the Solicitation, or any combination deemed most advantageous to the City. Bids that specify an “all or none” award may be considered if a single award is advantageous.

Award: The City will award contracts to the bidder whose offer represents the “best value” to the City, price and other factors considered. The specific award strategy and evaluation factors will be stated in the specifications included in this RFP.

The following criteria may be considered to determine the best value (see section 252.043 of the Texas Local Government Code):

- Purchase Price; 45%
- Reputation of the bidder and of the bidder’s goods or services; Quality of the bidder’s goods or services; Extent to which the goods or services meet the City’s needs; 15%
- Bidder’s past relationship with the City; 25%
- Impact on the ability of the City to comply with laws and rules relating to contracting with historically underutilized businesses and non-profit organizations employing persons with disabilities; 5%
- Total long-term cost to the City to acquire the bidder’s goods or services; and any relevant criteria specifically listed in the request for bids or proposals. Total long-term cost may include specification conformance, delivery requirements, the life expectancy, cost of maintenance and operation, operating efficiency, training requirements, disposal value, warranties and other factors contributing to the overall acquisition cost of the product/services. 10%

The City Council, when considering competitive sealed bids, may enter into a contract for certain purchases with a bidder whose principal place of business is in the corporate limits of the City of Granbury and whose bid is within 3 or 5 percent of the lowest bid, depending on the value of the request and goods or services requested, if the lowest bid is from a business outside the municipality and contracting with the local bidder would provide the best combination of price and other economic benefits to the municipality. Bidders interested in applying for local preference consideration shall complete the attachment titled “CONSIDERATION OF LOCATION OF BIDDER’S PRINCIPAL PLACE OF BUSINESS” and return it with their bid.



Acceptance of Bid: Acceptance of a Bid will be in the form of a Purchase Order or a Contract. Subsequent purchase releases may be issued as appropriate. The contents of a Bid shall become a part of the Contract. Under no circumstances will the City be responsible for Goods or Services provided without an acceptance signed by an Authorized City Representative.

Reservations:

The City expressly reserves the right to:

- Specify approximate quantities in the Solicitation;
- Extend the Solicitation opening date and time;
- Consider and accept alternate Bids, if specified in the Solicitation, when most advantageous to the City;
- Waive as an informality, minor deviations from specifications provided they do not affect competition or result in functionally unacceptable goods or services;
- Waive any minor informality in any Bid or Solicitation procedure (a minor informality is one that does not affect the competitiveness of the Bidder);
- Add additional terms or modify existing terms in the Solicitation;
- Reject a bid because of unbalanced unit prices bid;
- Reject or cancel any or all Bids;
- Reissue a Solicitation;
- Procure any item by other means; and/or
- Award to multiple Contractors on a non-exclusive award basis, or primary and secondary Contractors.

POST-BID DOCUMENTS REQUIRED FROM BIDDERS

- **Certificates of Insurance:** When insurance is required, the successful Bidder must provide Certificates of Insurance in the amounts and for the coverages required to the Purchasing Manager office within 14 calendar days after notification of award, or as otherwise required by the Solicitation.
- **Contractor Compliance to Texas Sales Tax Code.**
- **Payment and/or Performance Bonds:** When Payment and/or Performance Bonds are required, the successful Bidder must provide the bonds, in the amounts and on the conditions required, within 14 calendar days after notification of award, or as otherwise required by the Solicitation.
- **Standard Public Works Contract.**
- **Certificate of Interested Parties Form 1295:** The successful bidder is required to complete online and notarize the Certificate of Interested Parties Form 1295 and the form must be submitted to the City Secretary before the purchase/contract will be presented to the City Council. The form may be



completed at https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm.

- **Conflict of Interest Questionnaire:** If an MBE goal has been established for the bid, the applicable documents **must** be submitted by all bidders wishing to continue in the bid evaluation process within five (5) City business days after the bid opening date, exclusive of the bid opening date, to the City location specified in the bid. Bidders shall obtain a receipt from the appropriate department as evidence that the City received the documentation.
- **W-9 Request for Taxpayer Identification Number and Certification.**

PROTEST PROCEDURE

Contractors who respond to Invitations to Bid have the right to protest the solicitation process or the bid award if they believe that there has been any impropriety or unfair criteria in the process.

The Contractor must submit any protest in writing to the Purchasing Manager within 14 days after the Contractor knows, or should have known, of the facts relating to the proposed action or award.

The Purchasing Manager, or designee, is authorized to resolve a protest concerning a purchasing action through telephone discussions, mail, email or in person meetings with the protesting Contractor.

After discussions or meetings, the Purchasing Manager or designee will issue a decision in writing, state the reasons for the action taken and inform the protesting Contractor of the right to review by a panel made up of City staff.

A City protest review panel will consist of a representative of the operating department, the Purchasing Manager and any other appropriate personnel or employees of the operating department.

If the panel is unable to resolve the protest, or if the panel makes a decision with which the Contractor does not agree, the protesting Contractor will be invited to attend the City Council meeting at which the recommended award is to be presented to the City Council and make known his/her concerns. The protesting Contractor will be instructed to arrive prior to the start of the City Council meeting and complete a card requesting to speak concerning the Mayor and Council Communication document (M&C) in question.

NON-DISCRIMINATION

During the performance of this contract, the contract shall not discriminate against any person or persons because of sex, race, religion, color, age, disability or national origin. (Ref., Item 107.136.2, Equal Employment Opportunity, NCT).



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VENDOR	Vendor Name:	
	Address:	
	City, State, Zip:	
	Bid Opening	10-25-2021

Item	Class-Item	Estimated Qty Per Year	Unit	Unit Price	Total Price
<p>The City of Granbury is seeking bids from qualified Vendors for an annual Agreement for Water Treatment Chemicals for the Water Treatment Plant. The Agreement will be for one (1), one-year period with options to renew for up to four (4) additional one-year periods. All items shall be bid per attached specifications. Unit prices shall include all associated costs, not limited to delivery, fuel and handling charges. No additional charges will be accepted or paid by the City.</p>					
1.000	Liquid Chlorine 150-lb Cylinders Minimum Shipment Quantity: _____	215		_____	_____
2.000	ALUMINUM CHLOROHYDRATE 23 % (ACH) Brand Name: _____ Minimum Shipment Quantity: _____ (SEE ATTACHED TECHNICAL SPECIFICATIONS)	25,000	GAL	_____	_____
3.000	SODIUM HYPOCHLORITE 12.5% (NaOCI) Brand Name: _____ Minimum Shipment Quantity: _____ (SEE ATTACHED TECHNICAL SPECIFICATIONS)	40,000	GAL	_____	_____



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VENDOR	Vendor Name:	
	Address:	
	City, State, Zip:	
	Bid Opening	10-25-2021

Item	Class-Item	Estimated Qty Per Year	Unit	Unit Price	Total Price
4.000	LIQUID AMMONIUM SULFATE (LAS) Brand Name: _____ Minimum Shipment Quantity: _____ (SEE ATTACHED TECHNICAL SPECIFICATIONS)	8,500	GAL	_____	_____
5.000	SODIUM HYDROXIDE 25% (NaOH) Brand Name: _____ Minimum Shipment Quantity: _____ (SEE ATTACHED TECHNICAL SPECIFICATIONS)	5,500	GAL	_____	_____
6.000	HYDROCHLORIC ACID 15% (HCL) Brand Name: _____ Minimum Shipment Quantity: _____ (SEE ATTACHED TECHNICAL SPECIFICATIONS)	2,000	GAL	_____	_____
7.000	CITRIC ACID 52% Brand Name: _____ Minimum Shipment Quantity: _____ (SEE ATTACHED TECHNICAL SPECIFICATIONS)	4,000	GAL	_____	_____



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VENDOR	Vendor Name:					
	Address:					
	City, State, Zip:					
	Bid Opening	10-25-2021				
8.000	SODIUM BISULFITE 39% (SBS)				GAL	
	Brand Name:			7,000		
	Minimum Shipment Quantity:					
	(SEE ATTACHED TECHNICAL SPECIFICATIONS)					
TOTAL PRICE:						
<p>BIDDER ACCEPTS ALL THE TERMS AND CONDITIONS OF THE ADVERTISEMENT OR INVITATION TO BID AND INSTRUCTIONS TO BIDS, INCLUDING WITHOUT LIMITATION THOSE DEALING WITH THE DISPOSITION OF BID SECURITY. THE BID WILL REMAIN SUBJECT TO ACCEPTANCE FOR 60 DAYS AFTER THE BID OPENING, OR FOR SUCH LONGER PERIOD OF TIME THAT BID MAY AGREE TO IN WRITING UPON REQUEST OF OWNER.</p> <p>TERM OF PAYMENT: _____ COMPANY: _____</p> <p>DELIVERY: _____ SIGNATURE: _____</p> <p>TELEPHONE NUMBER: _____ NAME & TITLE: _____</p>						



WATER TREATMENT CHEMICALS SPECIFICATION

**TECHNICAL SPECIFICATIONS FOR
ALUMINUM CHLOROHYDRATE (23%)
CITY OF GRANBURY**

1. GENERAL

- 1.1. The intent and purpose of this specification (Specification or Specifications) is to provide for the delivery of bulk liquid aluminum chlorohydrate to the City of Granbury, Texas (City) Surface Water Treatment Plant located at 1420 E Pearl, Granbury, TX 76048.
- 1.2. Term of the purchase order period is to begin on October 1, 2021 and end on September 30, 2022 (City's Fiscal Year) for a total of 12 months unless terminated early as provided for in Sections 3.10, 5.1.2, 5.1.5, and 9.1 of this Specification.

2. VENDOR QUALIFICATIONS/SUBMITTALS

- 2.1. Each prospective vendor shall submit a sample of its product representative of their manufacturing process to an approved testing laboratory for analysis. The laboratory shall ascertain aluminum concentration, specific gravity and pH of prospective vendor's sample. Each prospective vendor shall supply results of the analysis to the City, signed by a corporate designated official. The cost of the analysis shall be borne by vendor. Failure to submit a sample or meet the requirements of the Specification shall result in the vendor being disqualified from this product procurement.
- 2.2. Each prospective vendor shall submit a reference list of a minimum of five (5) customers that use or have used aluminum chlorohydrate for water treatment. Failure to disclose references will be grounds for disqualifying the vendor from this product procurement. Previous performance will be considered as part of the evaluation of quotations.

3. DELIVERY REQUIREMENTS

- 3.1. Vendor shall make deliveries within one (1) business days after receipt of written or verbal order issued by the City or the City's designated representative.
- 3.2. All deliveries of bulk aluminum chlorohydrate shall be freight prepaid, F.O.B. to 1420 E Pearl, Granbury, TX 76048. The site has limited (controlled) access.
 - 3.2.1. The bulk storage tank volume is 6500 gallons.
 - 3.2.2. Estimated usage of bulk aluminum chlorohydrate is 50-100 gallons per day (18,000-37,000 gallons per year) depending on raw water flow.

- 3.3. Delivery time of day shall be arranged upon placement of order and shall be between the hours of 8:00 A.M. and 4:30 P.M to the Surface Water Treatment Plant. Requests to deviate from this schedule must be confirmed with the City or the City's designated representative 24-hours prior to the scheduled delivery and must conform to the delivery conditions set forth in these specifications.
- 3.4. Packaging and shipment of aluminum chlorohydrate shall conform to all current regulations of the State of Texas, the United States Department of Transportation and all other applicable regulatory agencies.
- 3.5. The City reserves the right to change quantities and delivery dates at its discretion with a 24-hour notice.
- 3.6. The vendor shall be responsible for pumping bulk aluminum chlorohydrate into the storage tank at the water treatment plant site and shall provide all necessary hoses, fittings, pumps, etc. required to safely and efficiently "offload" the aluminum chlorohydrate into designated storage tank. Vendor shall furnish an approved (by City or its designated representative), leak-free connection device between the transportation equipment and City's bulk storage tank. Vendor shall only make the connection to the City's storage tank and fill point location in the presence of a member of the on-duty water plant operational staff to prevent accidental discharge of the product into the wrong storage tank(s).
- 3.7. The vendor shall be responsible for any spills resulting from the failure of its or its subcontractor's delivery equipment or from failure of attendant delivery personnel in the proper performance of their duties. Proper performance shall require delivery personnel's constant inspection and observation of unloading operations and knowledgeable response to problems or emergencies, which would most commonly be expected to occur. The City or its designated representative reserves the right to refuse any and all deliveries made with equipment that is poorly maintained and/or leaking. The vendor shall observe the entire filling operation at the water treatment plant site and shall immediately report any spills caused during the filling operations. The vendor shall take immediate and appropriate actions to clean up any spilled aluminum chlorohydrate. If the spill is not cleaned up, the City or its designated representative may hire a qualified company to clean up the spill, and the cost of such service will be charged to the vendor and deducted from the amount due to the vendor. If the City's unloading equipment such as pipe, valves or level indication and alarms should fail and the spillage is not the fault of the vendor or its subcontractor, the vendor shall be relieved of cleanup of the spill.
- 3.8. The transporting equipment shall be clean and free of residue that may contaminate the vendor's product or impede the unloading process. It is the vendor's

responsibility to verify the cleanliness of the transporting equipment before loading. All appurtenant valves, pumps, and discharge hoses used for the delivery of aluminum chlorohydrate shall be supplied by the vendor and shall be clean and free from contaminating material. The City or its designated representative may reject a load if the equipment is not properly cleaned.

- 3.9. All delivery vehicle drivers shall have a proper commercial driver's license.
- 3.10. Delivery Shipments shall be rejected which fail to meet any of the requirements of this Specification. In the event a delivery shipment is rejected, upon notification to the vendor that the shipment is rejected, vendor shall be required to ship a replacement delivery within twenty-four (24) hours from time of notification. Failure to provide replacement product that meets this Specification within the prescribed time period will constitute failure to comply with the delivery requirements set forth in this document and termination of this purchase order at the discretion of the City.

4. PRODUCT MATERIAL REQUIREMENTS

- 4.1. The aluminum chlorohydrate delivered under this specification must conform to the American National Standards Institute/National Sanitation Foundation Institute for Drinking Water Treatment Chemical – Health Effects, ANSI/NSF 60.
- 4.2. The aluminum chlorohydrate delivered under this specification must conform to the American National Standards Institute/American Water Works Association standard B408-10 for liquid polyaluminum chloride or the most current AWWA standard.
- 4.3. The aluminum chlorohydrate solution will be prepared so that a homogeneous, well-mixed product is received at the City's location as identified in section 3.2 of these specifications.
- 4.4. The chemical and physical properties of the aluminum chlorohydrate delivered under this Specification shall be as follows:

▪Appearance:	Clear to slightly hazy
▪pH:	4.0-4.4
▪Basicity:	75-90%
▪Specific Gravity @ 20 deg C:	1.33-1.35
▪Al ₂ O ₃ :	23% minimum
▪Al:Cl Ratio:	1.9:1-2.1:1
▪%Al:	12.2-12.7%
▪%Cl:	7.9-8.4%

- 4.5. The aluminum chlorohydrate supplied shall contain no soluble materials or organic substances in quantities capable of producing deleterious or injurious effects on the health of those consuming water treated with the aluminum chlorohydrate at dosages of less than 250 mg/L.

5. QUALITY ASSURANCE, SAFETY AND TRAINING

5.1. Sampling and Testing

- 5.1.1. All Sampling and Testing shall be in accordance with AWWA B408-10 standards or latest revision of AWWA's aluminum chlorohydrate standard.

- 5.1.2. Sampling Prior to Unloading: The vendor's transportation equipment shall have a sample port to provide a sample for analysis prior to hooking up and transferring the load to the City's bulk storage tank. At the sole discretion of the City, the vendor's delivery personnel (driver) may be asked to provide a sample of aluminum chlorohydrate before transferring the load to the City's bulk storage tank. The City will supply the sample container and the driver shall collect the sample from the transportation equipment and turn it over to a City's designated representative. The sample shall be considered representative of the load. The City or its designated reserves the right to subject samples of the aluminum chlorohydrate to complete analyses to ensure that it meets these Specifications and AWWA B408-10. Three failures of these Specifications and AWWA B408-10 during any period of this purchase order shall constitute grounds for termination of the vendor's purchase order from City of Granbury.

- 5.1.3. Certified Analysis. Vendor shall supply an affidavit, signed by a corporate designated official, certifying that the aluminum chlorohydrate furnished by the vendor, complies with all applicable requirements of this Specification and AWWA Standard B408-10, latest revision.

- 5.1.4. Manufacturer's Laboratory Delivery Reports. A certified report from the manufacturer shall be submitted for each aluminum chlorohydrate delivery to the City. The report shall contain the following data:

- Date and time of manufacture
- Lot number
- Quantity
- pH
- Percent Basicity
- Specific Gravity @ 20 deg C
- Percent Al₂O₃

- Al:Cl Ratio
- Percent Al
- Percent Cl

5.1.5. No deliveries will be accepted by the City or its designated representative unless accompanied by said certified laboratory report for the specific batch of aluminum chlorohydrate delivered showing the above data and that it conforms to the Specification. Failure to comply with this provision three (3) times during the purchase order period shall constitute sufficient grounds for termination of the purchase order from the City.

6. OCCUPATIONAL HEALTH AND SAFETY

6.1. Vendor must ensure delivery personnel's compliance with all OSHA requirements, including personal protective equipment for vendor delivery personnel, including without limitation chemical goggles, transparent face shield and hard hat, rubber gloves, rubber boots, and rubber or plastic-coated fabric apron or slicker suit. Vendor delivery personnel must wear at minimum, chemical goggles and rubber gloves when handling hoses and valves.

7. Safety Data Sheets. Any chemical delivered from the vendor must be accompanied by a Safety Data Sheet (SDS). The SDS must be maintained by the user agency and must include the following information:

- 7.1. The Chemical Name and the common name of the toxic substance
- 7.2. The hazards and other risks in the use of the toxic substance, including:
- 7.3. The potential for fire, explosion, corrosivity and reactivity;
- 7.4. The known acute and chronic health effects of risks from exposure, including the medical conditions which are generally recognized as being aggravated by exposure to the toxic substance; and
- 7.5. The primary routes of entry and symptoms of overexposure.
- 7.6. The proper precautions, handling practices, necessary personal protective equipment, and other safety precautions in the use of, or exposure to, the toxic substances, including appropriate emergency treatment in the case of overexposure.
- 7.7. The emergency procedure for spills, fire, disposal and first aid.
- 7.8. A description, in lay terms, of the known specific potential health risks posed by the toxic substance intended to alert any person reading this information.
- 7.9. The year and month, if available, that the information was compiled and the name, address, and emergency telephone number of the manufacturer responsible for preparing the information.

8. The responsibility for compliance with Federal and State rules and regulations regarding vendor caused spills or releases shall be the sole responsibility of the vendor. The vendor

shall indemnify and hold the City harmless for any failure to properly report and /or comply with this provision. In addition, vendor shall bear all expenses of spills, unless caused by the sole negligence of the City or its designated representative.

9. TERMINATION

9.1. In addition to the various statements in this Specification stating the grounds for termination of the vendor's purchase order to supply aluminum chlorohydrate to the City, and in addition to any other remedies, including the right to obtain cover and charge vendor for the costs of cover vendor's failure to comply with this Specification three (3) times over the duration of this purchase order shall constitute sufficient grounds for termination of the purchase order by the City. These failures any three of which can result in termination of the purchase order, include, but are not limited to, failure to deliver in a timely manner, failure to deliver with proper equipment, failure of the aluminum chlorohydrate to meet the Specification at any time, failure to provide a certificate of analysis, failure to comply with the safety and OSHA requirements of the Specification.

10. SECURITY PROVISIONS

- 10.1. All Shippers and vendors shall provide the City or its designated representative with a summary of the actions taken to reduce the possibility of criminal activity during packaging and shipment of products and materials to designated facilities.
- 10.2. All vendors (and their transportation companies) shall send a list of names of representatives that are authorized to enter designated facilities on their behalf. This list will be kept current with any personnel changes being reflected on the list.
- 10.3. All delivery personnel must have a photo ID and appropriate company identification.
- 10.4. All vendors and delivery personnel must sign in and out of designated facilities.
- 10.5. Chemical deliveries will strictly follow the City's or its designated representative's bulk off-loading policy and procedure where applicable.
- 10.6. No unscheduled or after-hours deliveries will be accepted without written or verbal permission from the City or its designated representative.
- 10.7. All deliveries must be made through the main entrance.

END

**TECHNICAL SPECIFICATIONS FOR
SODIUM HYPOCHLORITE (12.5%)
CITY OF GRANBURY**

1. GENERAL

- 1.1. The intent and purpose of this specification (Specification or Specifications) is to provide for the delivery of bulk liquid sodium hypochlorite to the City of Granbury, Texas (City) Surface Water Treatment Plant located at 1420 E Pearl, Granbury, TX 76048.
- 1.2. Term of the purchase order period is to begin on October 1, 2021 and end on September 30, 2022 (City's Fiscal Year) for a total of 12 months unless terminated early as provided for in Sections 3.10, 5.1.2, 5.1.5, and 9.1 of this Specification.

2. VENDOR QUALIFICATIONS/SUBMITTALS

- 2.1. Each prospective vendor shall submit a sample of its product representative of their manufacturing process to an approved testing laboratory for analysis. The laboratory shall ascertain concentration, specific gravity and pH of prospective vendor's sample. Each prospective vendor shall supply results of the analysis to the City, signed by a corporate designated official. The cost of the analysis shall be borne by vendor. Failure to submit a sample or meet the requirements of the Specification shall result in the vendor being disqualified from this product procurement.
- 2.2. Each prospective vendor shall submit a reference list of a minimum of five (5) customers that use or have used sodium hypochlorite for water treatment. Failure to disclose references will be grounds for disqualifying the vendor from this product procurement. Previous performance will be considered as part of the evaluation of quotations.

3. DELIVERY REQUIREMENTS

- 3.1. Vendor shall make deliveries within one (1) business days after receipt of written or verbal order issued by the City or the City's designated representative.
- 3.2. All deliveries of bulk sodium hypochlorite shall be freight prepaid, F.O.B. to 1420 E Pearl, Granbury, TX 76048. The site has limited (controlled) access.
 - 3.2.1. The bulk storage tank volume is 6500 gallons.
 - 3.2.2. Estimated usage of bulk sodium hypochlorite is 7-15 gallons per day (2,600-5,500 gallons per year) depending on raw water flow.

- 3.3. Delivery time of day shall be arranged upon placement of order and shall be between the hours of 8:00 A.M. and 4:30 P.M to the Surface Water Treatment Plant. Requests to deviate from this schedule must be confirmed with the City or the City's designated representative 24-hours prior to the scheduled delivery and must conform to the delivery conditions set forth in these specifications.
- 3.4. Packaging and shipment of sodium hypochlorite shall conform to all current regulations of the State of Texas, the United States Department of Transportation and all other applicable regulatory agencies.
- 3.5. The City reserves the right to change quantities and delivery dates at its discretion with a 24-hour notice.
- 3.6. The vendor shall be responsible for pumping bulk sodium hypochlorite into the storage tank at the water treatment plant site and shall provide all necessary hoses, fittings, pumps, etc. required to safely and efficiently "offload" the sodium hypochlorite into designated storage tank. Vendor shall furnish an approved (by City or its designated representative), leak-free connection device between the transportation equipment and City's bulk storage tank. Vendor shall only make the connection to the City's storage tank and fill point location in the presence of a member of the on-duty water plant operational staff to prevent accidental discharge of the product into the wrong storage tank(s).
- 3.7. The vendor shall be responsible for any spills resulting from the failure of its or its subcontractor's delivery equipment or from failure of attendant delivery personnel in the proper performance of their duties. Proper performance shall require delivery personnel's constant inspection and observation of unloading operations and knowledgeable response to problems or emergencies, which would most commonly be expected to occur. The City or its designated representative reserves the right to refuse any and all deliveries made with equipment that is poorly maintained and/or leaking. The vendor shall observe the entire filling operation at the water treatment plant site and shall immediately report any spills caused during the filling operations. The vendor shall take immediate and appropriate actions to clean up any spilled sodium hypochlorite. If the spill is not cleaned up, the City or its designated representative may hire a qualified company to clean up the spill, and the cost of such service will be charged to the vendor and deducted from the amount due to the vendor. If the City's unloading equipment such as pipe, valves or level indication and alarms should fail and the spillage is not the fault of the vendor or its subcontractor, the vendor shall be relieved of cleanup of the spill.
- 3.8. The transporting equipment shall be clean and free of residue that may contaminate the vendor's product or impede the unloading process. It is the vendor's

responsibility to verify the cleanliness of the transporting equipment before loading. All appurtenant valves, pumps, and discharge hoses used for the delivery of sodium hypochlorite shall be supplied by the vendor and shall be clean and free from contaminating material. The City or its designated representative may reject a load if the equipment is not properly cleaned.

- 3.9. All delivery vehicle drivers shall have a proper commercial driver's license.
- 3.10. Delivery Shipments shall be rejected which fail to meet any of the requirements of this Specification. In the event a delivery shipment is rejected, upon notification to the vendor that the shipment is rejected, vendor shall be required to ship a replacement delivery within twenty-four (24) hours from time of notification. Failure to provide replacement product that meets this Specification within the prescribed time period will constitute failure to comply with the delivery requirements set forth in this document and termination of this purchase order at the discretion of the City.

4. PRODUCT MATERIAL REQUIREMENTS

- 4.1. The sodium hypochlorite delivered under this specification must conform to the American National Standards Institute/National Sanitation Foundation Institute for Drinking Water Treatment Chemical – Health Effects, ANSI/NSF 60.
- 4.2. The sodium hypochlorite delivered under this specification must conform to the American National Standards Institute/American Water Works Association standard B300-10 for liquid sodium hypochlorite or the most current AWWA standard.
- 4.3. The sodium hypochlorite solution will be prepared so that a homogeneous, well-mixed product is received at the City's location as identified in section 3.2 of these specifications.
- 4.4. The chemical and physical properties of the sodium hypochlorite delivered under this Specification shall be as follows:

- Appearance: Clear to slightly hazy
- Specific Gravity @ 20 deg C: 1.196
- Sodium Hypochlorite, wt %: 12.5% minimum
- Available Chlorine, wt %: 11.9%

5. QUALITY ASSURANCE, SAFETY AND TRAINING

- 5.1. Sampling and Testing

- 5.1.1. All Sampling and Testing shall be in accordance with AWWA B300-10 standards or latest revision of AWWA's sodium hypochlorite standard.
- 5.1.2. Sampling Prior to Unloading: The vendor's transportation equipment shall have a sample port to provide a sample for analysis prior to hooking up and transferring the load to the City's bulk storage tank. At the sole discretion of the City, the vendor's delivery personnel (driver) may be asked to provide a sample of sodium hypochlorite before transferring the load to the City's bulk storage tank. The City will supply the sample container and the driver shall collect the sample from the transportation equipment and turn it over to a City's designated representative. The sample shall be considered representative of the load. The City or its designated reserves the right to subject samples of the sodium hypochlorite to complete analyses to ensure that it meets these Specifications and AWWA B300-10. Three failures of these Specifications and AWWA B300-10 during any period of this purchase order shall constitute grounds for termination of the vendor's purchase order from City of Granbury.
- 5.1.3. Certified Analysis. Vendor shall supply an affidavit, signed by a corporate designated official, certifying that the sodium hypochlorite furnished by the vendor, complies with all applicable requirements of this Specification and AWWA Standard B300-10, latest revision.
- 5.1.4. Manufacturer's Laboratory Delivery Reports. A certified report from the manufacturer shall be submitted for each sodium hypochlorite delivery to the City. The report shall contain the following data:
- Date and time of manufacture
 - Lot number
 - Quantity
 - Specific Gravity @ 20 deg C
 - Percent Sodium Hypochlorite
 - Percent Chlorine
- 5.1.5. No deliveries will be accepted by the City or its designated representative unless accompanied by said certified laboratory report for the specific batch of sodium hypochlorite delivered showing the above data and that it conforms to the Specification. Failure to comply with this provision three (3) times during the purchase order period shall constitute sufficient grounds for termination of the purchase order from the City.

6. OCCUPATIONAL HEALTH AND SAFETY

- 6.1. Vendor must ensure delivery personnel's compliance with all OSHA requirements, including personal protective equipment for vendor delivery personnel, including without limitation chemical goggles, transparent face shield and hard hat, rubber gloves, rubber boots, and rubber or plastic-coated fabric apron or slicker suit. Vendor delivery personnel must wear at minimum, chemical goggles and rubber gloves when handling hoses and valves.
7. Safety Data Sheets. Any chemical delivered from the vendor must be accompanied by a Safety Data Sheet (SDS). The SDS must be maintained by the user agency and must include the following information:
 - 7.1. The Chemical Name and the common name of the toxic substance
 - 7.2. The hazards and other risks in the use of the toxic substance, including:
 - 7.3. The potential for fire, explosion, corrosivity and reactivity;
 - 7.4. The known acute and chronic health effects of risks from exposure, including the medical conditions which are generally recognized as being aggravated by exposure to the toxic substance; and
 - 7.5. The primary routes of entry and symptoms of overexposure.
 - 7.6. The proper precautions, handling practices, necessary personal protective equipment, and other safety precautions in the use of, or exposure to, the toxic substances, including appropriate emergency treatment in the case of overexposure.
 - 7.7. The emergency procedure for spills, fire, disposal and first aid.
 - 7.8. A description, in lay terms, of the known specific potential health risks posed by the toxic substance intended to alert any person reading this information.
 - 7.9. The year and month, if available, that the information was compiled and the name, address, and emergency telephone number of the manufacturer responsible for preparing the information.
8. The responsibility for compliance with Federal and State rules and regulations regarding vendor caused spills or releases shall be the sole responsibility of the vendor. The vendor shall indemnify and hold the City harmless for any failure to properly report and /or comply with this provision. In addition, vendor shall bear all expenses of spills, unless caused by the sole negligence of the City or its designated representative.
9. TERMINATION
 - 9.1. In addition to the various statements in this Specification stating the grounds for termination of the vendor's purchase order to supply sodium hypochlorite to the City, and in addition to any other remedies, including the right to obtain cover and charge vendor for the costs of cover vendor's failure to comply with this Specification three (3) times over the duration of this purchase order shall constitute sufficient grounds for termination of the purchase order by the City. These failures

any three of which can result in termination of the purchase order, include, but are not limited to, failure to deliver in a timely manner, failure to deliver with proper equipment, failure of the sodium hypochlorite to meet the Specification at any time, failure to provide a certificate of analysis, failure to comply with the safety and OSHA requirements of the Specification.

10. SECURITY PROVISIONS

- 10.1. All Shippers and vendors shall provide the City or its designated representative with a summary of the actions taken to reduce the possibility of criminal activity during packaging and shipment of products and materials to designated facilities.
- 10.2. All vendors (and their transportation companies) shall send a list of names of representatives that are authorized to enter designated facilities on their behalf. This list will be kept current with any personnel changes being reflected on the list.
- 10.3. All delivery personnel must have a photo ID and appropriate company identification.
- 10.4. All vendors and delivery personnel must sign in and out of designated facilities.
- 10.5. Chemical deliveries will strictly follow the City's or its designated representative's bulk off-loading policy and procedure where applicable.
- 10.6. No unscheduled or after-hours deliveries will be accepted without written or verbal permission from the City or its designated representative.
- 10.7. All deliveries must be made through the main entrance.

END

**TECHNICAL SPECIFICATIONS FOR
LIQUID AMMONIUM SULFATE
CITY OF GRANBURY**

1. GENERAL

- 1.1. The intent and purpose of this specification (Specification or Specifications) is to provide for the delivery of bulk liquid ammonium sulfate to the City of Granbury, Texas (City) Regional Surface Water Treatment Plant located at 1420 E Pearl, Granbury, TX 76048.
- 1.2. Term of the purchase order period is to begin on October 1, 2021 and end on September 30, 2022 (City's Fiscal Year) for a total of 12 months unless terminated early as provided for in Sections 5.1.2, 5.1.5, and 9.1 of this Specification.

2. VENDOR QUALIFICATIONS/SUBMITTALS

- 2.1. Each prospective vendor shall submit a sample of its product representative of their manufacturing process to an approved testing laboratory for analysis. The laboratory shall ascertain ammonia concentration, specific gravity and pH of prospective vendor's sample. Each prospective vendor shall supply results of the analysis to the City, signed by a corporate designated official. The cost of the analysis shall be borne by vendor. Failure to submit a sample or meet the requirements of the Specification shall result in the vendor being disqualified from this product procurement.
- 2.2. Each prospective vendor shall submit a reference list of a minimum of five (5) customers that use or have used liquid ammonium sulfate for water treatment. Failure to disclose references will be grounds for disqualifying the vendor from this product procurement. Previous performance will be considered as part of the evaluation of quotations.

3. DELIVERY REQUIREMENTS

- 3.1. Vendor shall make deliveries within one (1) business day after receipt of written or verbal order issued by the City or the City's designated representative.
- 3.2. All deliveries of bulk liquid ammonium sulfate shall be freight prepaid, F.O.B. to 1420 E Pearl, Granbury, TX 76048. The site has limited (controlled) access.
 - 3.2.1. The bulk storage tank volume is 6500 gallons.
 - 3.2.2. Estimated usage of bulk liquid ammonium sulfate is 20-30 gallons per day (7,000-11,000 gallons per year) depending on raw water flow.

- 3.3. Delivery time of day shall be arranged upon placement of order and shall be between the hours of 8:00 A.M. and 4:30 P.M to any facility as shown above. Requests to deviate from this schedule must be confirmed with the City or the City's designated representative 24-hours prior to the scheduled delivery and must conform to the delivery conditions set forth in these specifications.
- 3.4. Packaging and shipment of liquid ammonium sulfate shall conform to all current regulations of the State of Texas, the United States Department of Transportation and all other applicable regulatory agencies.
- 3.5. The City reserves the right to change quantities and delivery dates at its discretion with a 24-hour notice.
- 3.6. The vendor shall be responsible for pumping bulk liquid ammonium sulfate into the storage tank at the water treatment plant site and shall provide all necessary hoses, fittings, pumps, etc. required to safely and efficiently "offload" the liquid ammonium sulfate into designated storage tank. Vendor shall furnish an approved (by City or its designated representative), leak-free connection device between the transportation equipment and City's bulk storage tank. Vendor shall only make the connection to the City's storage tank and fill point location in the presence of a member of the on-duty water plant operational staff to prevent accidental discharge of the product into the wrong storage tank(s).
- 3.7. The vendor shall be responsible for any spills resulting from the failure of its or its subcontractor's delivery equipment or from failure of attendant delivery personnel in the proper performance of their duties. Proper performance shall require delivery personnel's constant inspection and observation of unloading operations and knowledgeable response to problems or emergencies, which would most commonly be expected to occur. The City or its designated representative reserves the right to refuse any and all deliveries made with equipment that is poorly maintained and/or leaking. The vendor shall observe the entire filling operation at the water treatment plant site and shall immediately report any spills caused during the filling operations. The vendor shall take immediate and appropriate actions to clean up any spilled liquid ammonium sulfate. If the spill is not cleaned up, the City or its designated representative may hire a qualified company to clean up the spill, and the cost of such service will be charged to the vendor and deducted from the amount due to the vendor. If the City's unloading equipment such as pipe, valves or level indication and alarms should fail and the spillage is not the fault of the vendor or its subcontractor, the vendor shall be relieved of cleanup of the spill.
- 3.8. The transporting equipment shall be clean and free of residue that may contaminate the vendor's product or impede the unloading process. It is the vendor's responsibility to verify the cleanliness of the transporting equipment before loading.

All appurtenant valves, pumps, and discharge hoses used for the delivery of ammonium sulfate shall be supplied by the vendor and shall be clean and free from contaminating material. The City or its designated representative may reject a load if the equipment is not properly cleaned.

- 3.9. All delivery vehicle drivers shall have a proper commercial driver's license.
- 3.10. Delivery Shipments shall be rejected which fail to meet any of the requirements of this Specification. In the event a delivery shipment is rejected, upon notification to the vendor that the shipment is rejected, vendor shall be required to ship a replacement delivery within twenty-four (24) hours from time of notification. Failure to provide replacement product that meets this Specification within the prescribed time period will constitute failure to comply with the delivery requirements set forth in this document and termination of this purchase order at the discretion of the City.

4. PRODUCT MATERIAL REQUIREMENTS

- 4.1. The liquid ammonium sulfate delivered under this specification must conform to the American National Standards Institute/National Sanitation Foundation Institute for Drinking Water Treatment Chemical – Health Effects, ANSI/NSF 60.
- 4.2. The liquid ammonium sulfate delivered under this specification must conform to the American National Standards Institute/American Water Works Association standard for ammonium sulfate AWWA B302-10 or the most current AWWA standard.
- 4.3. The liquid ammonium sulfate solution will be prepared at the manufacturer's or vendor's site such that a homogeneous, well-mixed product is received at the City's location as identified in section 3.2 and section 3.3 of these specifications.
- 4.4. The chemical and physical properties of the liquid ammonium sulfate delivered under this Specification shall be as follows:
 - Appearance and odor: Clear, pale yellow liquid with no odor
 - pH: 4.0-7.0
 - Solubility in water: Complete
 - Specific Gravity: 1.20-1.23
 - Sulfuric acid diammonium: 38-40% (wt% dry salt)
 - Ammonia availability: 10%
- 4.5. The liquid ammonium sulfate supplied shall contain no soluble materials or organic substances in quantities capable of producing deleterious or injurious effects on the health of those consuming water treated with the liquid ammonium sulfate.

5. QUALITY ASSURANCE, SAFETY AND TRAINING

5.1. Sampling and Testing

- 5.1.1. All Sampling and Testing shall be in accordance with AWWA B302-10 standards or latest revision of AWWA's Ammonium Sulfate standard.
- 5.1.2. Sampling Prior to Unloading: The vendor's transportation equipment shall have a sample port to provide a sample for analysis prior to hooking up and transferring the load to the City's bulk storage tank. At the sole discretion of the City, the vendor's delivery personnel (driver) may be asked to provide a sample of liquid ammonium sulfate before transferring the load to the City's bulk storage tank. The City will supply the sample container and the driver shall collect the sample from the transportation equipment and turn it over to a City's designated representative. The sample shall be considered representative of the load. The City or its designated reserves the right to subject samples of the liquid ammonium sulfate to complete analyses to ensure that it meets these Specifications and AWWA B302-10. Three failures of these Specifications and AWWA B302-10 during any period of this purchase order shall constitute grounds for termination of the vendor's purchase order from City of Granbury.
- 5.1.3. Certified Analysis. Vendor shall supply an affidavit, signed by a corporate designated official, certifying that the liquid ammonium sulfate furnished by the vendor, complies with all applicable requirements of this Specification and AWWA Standard B302-10, latest revision. The affidavit shall also indicate compliance with Water Chemicals Codex directives, latest revision, for impurity limits.
- 5.1.4. Manufacturer's Laboratory Delivery Reports. A certified report from the manufacturer shall be submitted for each liquid ammonium sulfate delivery to the City. The report shall contain the following data:
- Date and time of manufacture
 - Lot number
 - Quantity
 - Percent by Weight Sulfuric Acid Diammonium
 - Percent by Weight Ammonium Sulfate
 - Specific Gravity
 - pH
 - Suspended Solids

5.1.5. No deliveries will be accepted by the City or its designated representative unless accompanied by said certified laboratory report for the specific batch of liquid ammonium sulfate delivered showing the above data and that it conforms to the Specification. Failure to comply with this provision three (3) times during the purchase order period shall constitute sufficient grounds for termination of the purchase order from the City.

6. OCCUPATIONAL HEALTH AND SAFETY

6.1. Vendor must ensure delivery personnel's compliance with all OSHA requirements, including personal protective equipment for vendor delivery personnel, including without limitation chemical goggles, transparent face shield and hard hat, rubber gloves, rubber boots, and rubber or plastic-coated fabric apron or slicker suit. Vendor delivery personnel must wear at minimum, chemical goggles and rubber gloves when handling hoses and valves.

7. Safety Data Sheets. Any chemical delivered from the vendor must be accompanied by a Safety Data Sheet (SDS). The SDS must be maintained by the user agency and must include the following information:

- 7.1. The Chemical Name and the common name of the toxic substance
- 7.2. The hazards and other risks in the use of the toxic substance, including:
- 7.3. The potential for fire, explosion, corrosivity and reactivity;
- 7.4. The known acute and chronic health effects of risks from exposure, including the medical conditions which are generally recognized as being aggravated by exposure to the toxic substance; and
- 7.5. The primary routes of entry and symptoms of overexposure.
- 7.6. The proper precautions, handling practices, necessary personal protective equipment, and other safety precautions in the use of, or exposure to, the toxic substances, including appropriate emergency treatment in the case of overexposure.
- 7.7. The emergency procedure for spills, fire, disposal and first aid.
- 7.8. A description, in lay terms, of the known specific potential health risks posed by the toxic substance intended to alert any person reading this information.
- 7.9. The year and month, if available, that the information was compiled and the name, address, and emergency telephone number of the manufacturer responsible for preparing the information.

8. The responsibility for compliance with Federal and State rules and regulations regarding vendor caused spills or releases shall be the sole responsibility of the vendor. The vendor shall indemnify and hold the City harmless for any failure to properly report and /or comply with this provision. In addition, vendor shall bear all expenses of spills, unless caused by the sole negligence of the City or its designated representative.

9. TERMINATION

- 9.1. In addition to the various statements in this Specification stating the grounds for termination of the vendor's purchase order to supply liquid ammonium sulfate to the City, and in addition to any other remedies, including the right to obtain cover and charge vendor for the costs of cover vendor's failure to comply with this Specification three (3) times over the duration of this purchase order shall constitute sufficient grounds for termination of the purchase order by the City. These failures any three of which can result in termination of the purchase order, include, but are not limited to, failure to deliver in a timely manner, failure to deliver with proper equipment, failure of the liquid ammonium sulfate to meet the Specification at any time, failure to provide a certificate of analysis, failure to comply with the safety and OSHA requirements of the Specification.

10. SECURITY PROVISIONS

- 10.1. All Shippers and vendors shall provide the City or its designated representative with a summary of the actions taken to reduce the possibility of criminal activity during packaging and shipment of products and materials to designated facilities.
- 10.2. All vendors (and their transportation companies) shall send a list of names of representatives that are authorized to enter designated facilities on their behalf. This list will be kept current with any personnel changes being reflected on the list.
- 10.3. All delivery personnel must have a photo ID and appropriate company identification.
- 10.4. All vendors and delivery personnel must sign in and out of designated facilities.
- 10.5. Chemical deliveries will strictly follow the City's or its designated representative's bulk off-loading policy and procedure where applicable.
- 10.6. No unscheduled or after-hours deliveries will be accepted without written or verbal permission from the City or its designated representative.
- 10.7. All deliveries must be made through the main entrance of the facilities identified in section 3.2 and section 3.3.

END

**TECHNICAL SPECIFICATIONS FOR
SODIUM HYDROXIDE (25%)
CITY OF GRANBURY**

1. GENERAL

- 1.1. The intent and purpose of this specification (Specification or Specifications) is to provide for the delivery of bulk 25% sodium hydroxide to the City of Granbury, Texas (City) Surface Water Treatment Plant located at 1420 E Pearl, Granbury, TX 76048.
- 1.2. Term of the purchase order period is to begin on October 1, 2021 and end on September 30, 2022 (City's Fiscal Year) for a total of 12 months unless terminated early as provided for in Sections 3.10, 5.1.2, 5.1.5, and 9.1 of this Specification.

2. VENDOR QUALIFICATIONS/SUBMITTALS

- 2.1. Each prospective vendor shall submit a sample of its product representative of their manufacturing process to an approved testing laboratory for analysis. The laboratory shall ascertain sodium hydroxide concentration, specific gravity and pH of prospective vendor's sample. Each prospective vendor shall supply results of the analysis to the City, signed by a corporate designated official. The cost of the analysis shall be borne by vendor. Failure to submit a sample or meet the requirements of the Specification shall result in the vendor being disqualified from this product procurement.
- 2.2. Each prospective vendor shall submit a reference list of a minimum of five (5) customers that use or have used sodium hydroxide for water treatment. Failure to disclose references will be grounds for disqualifying the vendor from this product procurement. Previous performance will be considered as part of the evaluation of quotations.

3. DELIVERY REQUIREMENTS

- 3.1. Vendor shall make deliveries within one (1) business day after receipt of written or verbal order issued by the City or the City's designated representative.
- 3.2. All deliveries of bulk sodium hydroxide shall be freight prepaid, F.O.B. to 1420 E Pearl, Granbury, TX 76048 The site has limited (controlled) access.
 - 3.2.1. The bulk storage tank volume is 6500 gallons.
 - 3.2.2. Estimated usage of bulk sodium hydroxide is 3-14 gallons per day (1,000-5,000 gallons per year) depending on raw water flow.

- 3.3. Delivery time of day shall be arranged upon placement of order and shall be between the hours of 8:00 A.M. and 4:30 P.M to the Surface Water Treatment Plant. Requests to deviate from this schedule must be confirmed with the City or the City's designated representative 24-hours prior to the scheduled delivery and must conform to the delivery conditions set forth in these specifications.
- 3.4. Packaging and shipment of sodium hydroxide shall conform to all current regulations of the State of Texas, the United States Department of Transportation and all other applicable regulatory agencies.
- 3.5. The City reserves the right to change quantities and delivery dates at its discretion with a 24-hour notice.
- 3.6. The vendor shall be responsible for pumping bulk sodium hydroxide into the storage tank at the water treatment plant site and shall provide all necessary hoses, fittings, pumps, etc. required to safely and efficiently "offload" the sodium hydroxide into designated storage tank. Vendor shall furnish an approved (by City or its designated representative), leak-free connection device between the transportation equipment and City's bulk storage tank. Vendor shall only make the connection to the City's storage tank and fill point location in the presence of a member of the on-duty water plant operational staff to prevent accidental discharge of the product into the wrong storage tank(s).
- 3.7. The vendor shall be responsible for any spills resulting from the failure of its or its subcontractor's delivery equipment or from failure of attendant delivery personnel in the proper performance of their duties. Proper performance shall require delivery personnel's constant inspection and observation of unloading operations and knowledgeable response to problems or emergencies, which would most commonly be expected to occur. The City or its designated representative reserves the right to refuse any and all deliveries made with equipment that is poorly maintained and/or leaking. The vendor shall observe the entire filling operation at the water treatment plant site and shall immediately report any spills caused during the filling operations. The vendor shall take immediate and appropriate actions to clean up any spilled sodium hydroxide. If the spill is not cleaned up, the City or its designated representative may hire a qualified company to clean up the spill, and the cost of such service will be charged to the vendor and deducted from the amount due to the vendor. If the City's unloading equipment such as pipe, valves or level indication and alarms should fail and the spillage is not the fault of the vendor or its subcontractor, the vendor shall be relieved of cleanup of the spill.
- 3.8. The transporting equipment shall be clean and free of residue that may contaminate the vendor's product or impede the unloading process. It is the vendor's

responsibility to verify the cleanliness of the transporting equipment before loading. All appurtenant valves, pumps, and discharge hoses used for the delivery of sodium hydroxide shall be supplied by the vendor and shall be clean and free from contaminating material. The City or its designated representative may reject a load if the equipment is not properly cleaned.

- 3.9. All delivery vehicle drivers shall have a proper commercial driver's license.
- 3.10. Delivery Shipments shall be rejected which fail to meet any of the requirements of this Specification. In the event a delivery shipment is rejected, upon notification to the vendor that the shipment is rejected, vendor shall be required to ship a replacement delivery within twenty-four (24) hours from time of notification. Failure to provide replacement product that meets this Specification within the prescribed time period will constitute failure to comply with the delivery requirements set forth in this document and termination of this purchase order at the discretion of the City.

4. PRODUCT MATERIAL REQUIREMENTS

- 4.1. The sodium hydroxide delivered under this specification must conform to the American National Standards Institute/National Sanitation Foundation Institute for Drinking Water Treatment Chemical – Health Effects, ANSI/NSF 60.
- 4.2. The sodium hydroxide delivered under this specification must conform to the American National Standards Institute/American Water Works Association standard B501-08 for sodium hydroxide or the most current AWWA standard.
- 4.3. The sodium hydroxide solution will be prepared so that a homogeneous, well-mixed product is received at the City's location as identified in section 3.2 of these specifications.
- 4.4. The chemical and physical properties of the sodium hydroxide delivered under this Specification shall be as follows:

▪Appearance:	Clear to slightly hazy
▪Specific Gravity @ 20 deg C:	1.17-1.19
▪Sodium hydroxide as NaOH %:	24-26%
▪Sodium carbonate as Na ₂ CO ₃ %:	≤0.15%
▪Sodium oxide as Na ₂ O %:	≤18.6-20.2
▪Sodium chloride as NaCl mg/L:	≤200
▪Sodium sulphate as Na ₂ SO ₄ mg/L:	≤80
▪Iron as Fe mg/L:	≤3

- 4.5. The sodium hydroxide supplied shall contain no soluble materials or organic substances in quantities capable of producing deleterious or injurious effects on the

health of those consuming water treated with the sodium hydroxide at dosages of less than 250 mg/L.

5. QUALITY ASSURANCE, SAFETY AND TRAINING

5.1. Sampling and Testing

5.1.1. All Sampling and Testing shall be in accordance with AWWA B501-08 standards or latest revision of AWWA's sodium hydroxide standard.

5.1.2. Sampling Prior to Unloading: The vendor's transportation equipment shall have a sample port to provide a sample for analysis prior to hooking up and transferring the load to the City's bulk storage tank. At the sole discretion of the City, the vendor's delivery personnel (driver) may be asked to provide a sample of sodium hydroxide before transferring the load to the City's bulk storage tank. The City will supply the sample container and the driver shall collect the sample from the transportation equipment and turn it over to a City's designated representative. The sample shall be considered representative of the load. The City or its designated reserves the right to subject samples of the sodium hydroxide to complete analyses to ensure that it meets these Specifications and AWWA B501-08. Three failures of these Specifications and AWWA B501-08 during any period of this purchase order shall constitute grounds for termination of the vendor's purchase order from City of Granbury.

5.1.3. Certified Analysis. Vendor shall supply an affidavit, signed by a corporate designated official, certifying that the sodium hydroxide furnished by the vendor, complies with all applicable requirements of this Specification and AWWA Standard B501-08, latest revision. The affidavit shall also indicate compliance with Water Chemicals Codex directives, latest revision, for impurity limits.

5.1.4. Manufacturer's Laboratory Delivery Reports. A certified report from the manufacturer shall be submitted for each sodium hydroxide delivery to the City. The report shall contain the following data:

- Date and time of manufacture
- Lot number
- Quantity
- Specific Gravity @ 20 deg C
- Sodium hydroxide as NaOH %
- Sodium carbonate as Na₂CO₃ %
- Sodium oxide as Na₂O %

- Sodium chloride as NaCl mg/L
- Sodium sulphate as Na₂SO₄ mg/L
- Iron as Fe mg/L

5.1.5. No deliveries will be accepted by the City or its designated representative unless accompanied by said certified laboratory report for the specific batch of sodium hydroxide delivered showing the above data and that it conforms to the Specification. Failure to comply with this provision three (3) times during the purchase order period shall constitute sufficient grounds for termination of the purchase order from the City.

6. OCCUPATIONAL HEALTH AND SAFETY

6.1. Vendor must ensure delivery personnel's compliance with all OSHA requirements, including personal protective equipment for vendor delivery personnel, including without limitation chemical goggles, transparent face shield and hard hat, rubber gloves, rubber boots, and rubber or plastic-coated fabric apron or slicker suit. Vendor delivery personnel must wear at minimum, chemical goggles and rubber gloves when handling hoses and valves.

7. Safety Data Sheets. Any chemical delivered from the vendor must be accompanied by a Safety Data Sheet (SDS). The SDS must be maintained by the user agency and must include the following information:

- 7.1. The Chemical Name and the common name of the toxic substance
- 7.2. The hazards and other risks in the use of the toxic substance, including:
- 7.3. The potential for fire, explosion, corrosivity and reactivity;
- 7.4. The known acute and chronic health effects of risks from exposure, including the medical conditions which are generally recognized as being aggravated by exposure to the toxic substance; and
- 7.5. The primary routes of entry and symptoms of overexposure.
- 7.6. The proper precautions, handling practices, necessary personal protective equipment, and other safety precautions in the use of, or exposure to, the toxic substances, including appropriate emergency treatment in the case of overexposure.
- 7.7. The emergency procedure for spills, fire, disposal and first aid.
- 7.8. A description, in lay terms, of the known specific potential health risks posed by the toxic substance intended to alert any person reading this information.
- 7.9. The year and month, if available, that the information was compiled and the name, address, and emergency telephone number of the manufacturer responsible for preparing the information.

8. The responsibility for compliance with Federal and State rules and regulations regarding vendor caused spills or releases shall be the sole responsibility of the vendor. The vendor

shall indemnify and hold the City harmless for any failure to properly report and /or comply with this provision. In addition, vendor shall bear all expenses of spills, unless caused by the sole negligence of the City or its designated representative.

9. TERMINATION

9.1. In addition to the various statements in this Specification stating the grounds for termination of the vendor's purchase order to supply sodium hydroxide to the City, and in addition to any other remedies, including the right to obtain cover and charge vendor for the costs of cover vendor's failure to comply with this Specification three (3) times over the duration of this purchase order shall constitute sufficient grounds for termination of the purchase order by the City. These failures any three of which can result in termination of the purchase order, include, but are not limited to, failure to deliver in a timely manner, failure to deliver with proper equipment, failure of the sodium hydroxide to meet the Specification at any time, failure to provide a certificate of analysis, failure to comply with the safety and OSHA requirements of the Specification.

10. SECURITY PROVISIONS

- 10.1. All Shippers and vendors shall provide the City or its designated representative with a summary of the actions taken to reduce the possibility of criminal activity during packaging and shipment of products and materials to designated facilities.
- 10.2. All vendors (and their transportation companies) shall send a list of names of representatives that are authorized to enter designated facilities on their behalf. This list will be kept current with any personnel changes being reflected on the list.
- 10.3. All delivery personnel must have a photo ID and appropriate company identification.
- 10.4. All vendors and delivery personnel must sign in and out of designated facilities.
- 10.5. Chemical deliveries will strictly follow the City's or its designated representative's bulk off-loading policy and procedure where applicable.
- 10.6. No unscheduled or after-hours deliveries will be accepted without written or verbal permission from the City or its designated representative.
- 10.7. All deliveries must be made through the main entrance.

END

**TECHNICAL SPECIFICATIONS FOR
HYDROCHLORIC ACID (15%)
CITY OF GRANBURY**

1. GENERAL

- 1.1. The intent and purpose of this specification (Specification or Specifications) is to provide for the delivery of bulk hydrochloric acid to the City of Granbury, Texas (City) Surface Water Treatment Plant located at 1420 E Pearl, Granbury, TX 76048.
- 1.2. Term of the purchase order period is to begin on October 1, 2021 and end on September 30, 2022 (City's Fiscal Year) for a total of 12 months unless terminated early as provided for in Sections 3.10, 5.1.1, 5.1.4, and 9.1 of this Specification.

2. VENDOR QUALIFICATIONS/SUBMITTALS

- 2.1. Each prospective vendor shall submit a sample of its product representative of their manufacturing process to an approved testing laboratory for analysis. The laboratory shall ascertain percent hydrogen chloride, specific gravity and pH of prospective vendor's sample. Each prospective vendor shall supply results of the analysis to the City, signed by a corporate designated official. The cost of the analysis shall be borne by vendor. Failure to submit a sample or meet the requirements of the Specification shall result in the vendor being disqualified from this product procurement.
- 2.2. Each prospective vendor shall submit a reference list of a minimum of five (5) customers that use or have used hydrochloric acid for water treatment. Failure to disclose references will be grounds for disqualifying the vendor from this product procurement. Previous performance will be considered as part of the evaluation of quotations.

3. DELIVERY REQUIREMENTS

- 3.1. Vendor shall make deliveries within one (1) business day after receipt of written or verbal order issued by the City or the City's designated representative.
- 3.2. All deliveries of bulk hydrochloric acid shall be freight prepaid, F.O.B. to 1420 E Pearl St, Granbury, TX 76048. The site has limited (controlled) access.
 - 3.2.1. The bulk storage tank volume is 550 gallons.
 - 3.2.2. Estimated usage of bulk hydrochloric acid is 300-900 gallons per year.

- 3.3. Delivery time of day shall be arranged upon placement of order and shall be between the hours of 8:00 A.M. and 4:30 P.M to the Regional Surface Water Treatment Plant. Requests to deviate from this schedule must be confirmed with the City or the City's designated representative 48-hours prior to the scheduled delivery and must conform to the delivery conditions set forth in these specifications.
- 3.4. Packaging and shipment of hydrochloric acid shall conform to all current regulations of the State of Texas, the United States Department of Transportation and all other applicable regulatory agencies.
- 3.5. The City reserves the right to change quantities and delivery dates at its discretion with a 48-hour notice.
- 3.6. The vendor shall be responsible for pumping bulk hydrochloric acid into the storage tank at the water treatment plant site if necessary and shall provide all necessary hoses, fittings, pumps, etc. required to safely and efficiently "offload" the hydrochloric acid into designated storage tank. Vendor shall furnish an approved (by City or its designated representative), leak-free connection device between the transportation equipment and City's bulk storage tank. Vendor shall only make the connection to the City's storage tank and fill point location in the presence of a member of the on-duty water plant operational staff to prevent accidental discharge of the product into the wrong storage tank(s).
- 3.7. The vendor shall be responsible for any spills resulting from the failure of its or its subcontractor's delivery equipment or from failure of attendant delivery personnel in the proper performance of their duties. Proper performance shall require delivery personnel's constant inspection and observation of unloading operations and knowledgeable response to problems or emergencies, which would most commonly be expected to occur. The City or its designated representative reserves the right to refuse any and all deliveries made with equipment that is poorly maintained and/or leaking. The vendor shall observe the entire filling operation at the water treatment plant site and shall immediately report any spills caused during the filling operations. The vendor shall take immediate and appropriate actions to clean up any spilled hydrochloric acid. If the spill is not cleaned up, the City or its designated representative may hire a qualified company to clean up the spill, and the cost of such service will be charged to the vendor and deducted from the amount due to the vendor. If the City's unloading equipment such as pipe, valves or level indication and alarms should fail and the spillage is not the fault of the vendor or its subcontractor, the vendor shall be relieved of cleanup of the spill.
- 3.8. The transporting equipment shall be clean and free of residue that may contaminate the vendor's product or impede the unloading process. It is the vendor's responsibility to verify the cleanliness of the transporting equipment before loading. All

appurtenant valves, pumps, and discharge hoses used for the delivery of hydrochloric acid shall be supplied by the vendor and shall be clean and free from contaminating material. The City or its designated representative may reject a load if the equipment is not properly cleaned.

- 3.9. All delivery vehicle drivers shall have a proper commercial driver's license.
- 3.10. Delivery Shipments shall be rejected which fail to meet any of the requirements of this Specification. In the event a delivery shipment is rejected, upon notification to the vendor that the shipment is rejected, vendor shall be required to ship a replacement delivery within twenty-four (24) hours from time of notification. Failure to provide replacement product that meets this Specification within the prescribed time period will constitute failure to comply with the delivery requirements set forth in this document and termination of this purchase order at the discretion of the City.

4. PRODUCT MATERIAL REQUIREMENTS

- 4.1. The hydrochloric acid delivered under this specification must conform to the American National Standards Institute/National Sanitation Foundation Institute for Drinking Water Treatment Chemical – Health Effects, ANSI/NSF 60.
- 4.2. The hydrochloric acid solution will be prepared so that a homogeneous, well-mixed product is received at the City's location as identified in section 3.2 of these specifications.
- 4.3. The chemical and physical properties of the hydrochloric acid delivered under this Specification shall be as follows:

▪Appearance:	Clear colorless liquid
▪pH:	<1
▪Specific Gravity @ 25 deg C:	1.075
▪Hydrogen chloride wt%:	97-103%
▪Iron mg/kg:	≤5
▪Heavy metals as Pb mg/kg:	≤1
▪Nonvolatile residue:	≤0.5%
▪Total organics mg/kg:	≤5
▪Oxidizing substances (as Cl ₂):	≤0.003%
▪Sulfate:	≤0.5%

- 4.4. The hydrochloric acid supplied shall contain no soluble materials or organic substances in quantities capable of producing deleterious or injurious effects on the health of those consuming water treated with the hydrochloric acid at dosages of less than 40 mg/L.

5. QUALITY ASSURANCE, SAFETY AND TRAINING

5.1. Sampling and Testing

5.1.1. Sampling Prior to Unloading: The vendor's transportation equipment shall have a sample port to provide a sample for analysis prior to hooking up and transferring the load to the City's bulk storage tank. At the sole discretion of the City, the vendor's delivery personnel (driver) may be asked to provide a sample of hydrochloric acid before transferring the load to the City's bulk storage tank. The City will supply the sample container and the driver shall collect the sample from the transportation equipment and turn it over to a City's designated representative. The sample shall be considered representative of the load. The City or its designated reserves the right to subject samples of the hydrochloric acid to complete analyses to ensure that it meets these Specifications. Three failures of these Specifications during any period of this purchase order shall constitute grounds for termination of the vendor's purchase order from City of Granbury.

5.1.2. Certified Analysis. Vendor shall supply an affidavit, signed by a corporate designated official, certifying that the hydrochloric acid furnished by the vendor, complies with all applicable requirements of this Specification.

5.1.3. Manufacturer's Laboratory Delivery Reports. A certified report from the manufacturer shall be submitted for each hydrochloric acid delivery to the City. The report shall contain the following data:

- Date and time of manufacture
- Lot number
- Quantity
- pH
- Specific Gravity @ 25 deg C
- Hydrogen chloride wt%
- Iron mg/kg
- Heavy metals as Pb mg/kg
- Nonvolatile residue
- Total organics mg/kg
- Oxidizing substances (as Cl₂)
- Sulfate

5.1.4. No deliveries will be accepted by the City or its designated representative unless accompanied by said certified laboratory report for the specific batch of hydrochloric acid delivered showing the above data and that it conforms to

the Specification. Failure to comply with this provision three (3) times during the purchase order period shall constitute sufficient grounds for termination of the purchase order from the City.

6. OCCUPATIONAL HEALTH AND SAFETY

- 6.1. Vendor must ensure delivery personnel's compliance with all OSHA requirements, including personal protective equipment for vendor delivery personnel, including without limitation chemical goggles, transparent face shield and hard hat, rubber gloves, rubber boots, and rubber or plastic-coated fabric apron or slicker suit. Vendor delivery personnel must wear at minimum, chemical goggles and rubber gloves when handling hoses and valves.
7. Safety Data Sheets. Any chemical delivered from the vendor must be accompanied by a Safety Data Sheet (SDS). The SDS must be maintained by the user agency and must include the following information:
 - 7.1. The Chemical Name and the common name of the toxic substance
 - 7.2. The hazards and other risks in the use of the toxic substance, including:
 - 7.3. The potential for fire, explosion, corrosivity and reactivity;
 - 7.4. The known acute and chronic health effects of risks from exposure, including the medical conditions which are generally recognized as being aggravated by exposure to the toxic substance; and
 - 7.5. The primary routes of entry and symptoms of overexposure.
 - 7.6. The proper precautions, handling practices, necessary personal protective equipment, and other safety precautions in the use of, or exposure to, the toxic substances, including appropriate emergency treatment in the case of overexposure.
 - 7.7. The emergency procedure for spills, fire, disposal and first aid.
 - 7.8. A description, in lay terms, of the known specific potential health risks posed by the toxic substance intended to alert any person reading this information.
 - 7.9. The year and month, if available, that the information was compiled and the name, address, and emergency telephone number of the manufacturer responsible for preparing the information.
8. The responsibility for compliance with Federal and State rules and regulations regarding vendor caused spills or releases shall be the sole responsibility of the vendor. The vendor shall indemnify and hold the City harmless for any failure to properly report and /or comply with this provision. In addition, vendor shall bear all expenses of spills, unless caused by the sole negligence of the City or its designated representative.

9. TERMINATION

- 9.1. In addition to the various statements in this Specification stating the grounds for termination of the vendor's purchase order to supply hydrochloric acid to the City, and in addition to any other remedies, including the right to obtain cover and charge vendor for the costs of cover vendor's failure to comply with this Specification three (3) times over the duration of this purchase order shall constitute sufficient grounds for termination of the purchase order by the City. These failures any three of which can result in termination of the purchase order, include, but are not limited to, failure to deliver in a timely manner, failure to deliver with proper equipment, failure of the hydrochloric acid to meet the Specification at any time, failure to provide a certificate of analysis, failure to comply with the safety and OSHA requirements of the Specification.

10. SECURITY PROVISIONS

- 10.1. All Shippers and vendors shall provide the City or its designated representative with a summary of the actions taken to reduce the possibility of criminal activity during packaging and shipment of products and materials to designated facilities.
- 10.2. All vendors (and their transportation companies) shall send a list of names of representatives that are authorized to enter designated facilities on their behalf. This list will be kept current with any personnel changes being reflected on the list.
- 10.3. All delivery personnel must have a photo ID and appropriate company identification.
- 10.4. All vendors and delivery personnel must sign in and out of designated facilities.
- 10.5. Chemical deliveries will strictly follow the City's or its designated representative's bulk off-loading policy and procedure where applicable.
- 10.6. No unscheduled or after-hours deliveries will be accepted without written or verbal permission from the City or its designated representative.
- 10.7. All deliveries must be made through the main entrance.

END

**TECHNICAL SPECIFICATIONS FOR
CITRIC ACID (50%)
CITY OF GRANBURY**

1. GENERAL

- 1.1. The intent and purpose of this specification (Specification or Specifications) is to provide for the delivery of bulk citric acid to the City of Granbury, Texas (City) Surface Water Treatment Plant located at 1420 E Pearl, Granbury, TX 76048.
- 1.2. Term of the purchase order period is to begin on October 1, 2021 and end on September 30, 2022 (City's Fiscal Year) for a total of 12 months unless terminated early as provided for in Sections 3.10, 5.1.2, 5.1.5, and 9.1 of this Specification.

2. VENDOR QUALIFICATIONS/SUBMITTALS

- 2.1. Each prospective vendor shall submit a sample of its product representative of their manufacturing process to an approved testing laboratory for analysis. The laboratory shall ascertain purity, specific gravity and pH of prospective vendor's sample. Each prospective vendor shall supply results of the analysis to the City, signed by a corporate designated official. The cost of the analysis shall be borne by vendor. Failure to submit a sample or meet the requirements of the Specification shall result in the vendor being disqualified from this product procurement.
- 2.2. Each prospective vendor shall submit a reference list of a minimum of five (5) customers that use or have used citric acid for water treatment. Failure to disclose references will be grounds for disqualifying the vendor from this product procurement. Previous performance will be considered as part of the evaluation of quotations.

3. DELIVERY REQUIREMENTS

- 3.1. Vendor shall make deliveries within one (1) business day after receipt of written or verbal order issued by the City or the City's designated representative.
- 3.2. All deliveries of bulk citric acid shall be freight prepaid, F.O.B. to 1420 E Pearl, Granbury, TX 76048. The site has limited (controlled) access.
 - 3.2.1. The bulk storage tank volume is 550 gallons.
 - 3.2.2. Estimated usage of bulk citric acid is 1,000-2,000 gallons per year.

- 3.3. Delivery time of day shall be arranged upon placement of order and shall be between the hours of 8:00 A.M. and 4:30 P.M to the Regional Surface Water Treatment Plant. Requests to deviate from this schedule must be confirmed with the City or the City's designated representative 24-hours prior to the scheduled delivery and must conform to the delivery conditions set forth in these specifications.
- 3.4. Packaging and shipment of citric acid shall conform to all current regulations of the State of Texas, the United States Department of Transportation and all other applicable regulatory agencies.
- 3.5. The City reserves the right to change quantities and delivery dates at its discretion with a 24-hour notice.
- 3.6. The vendor shall be responsible for pumping bulk citric acid into the storage tank at the water treatment plant site and shall provide all necessary hoses, fittings, pumps, etc. required to safely and efficiently "offload" the citric acid into designated storage tank. Vendor shall furnish an approved (by City or its designated representative), leak-free connection device between the transportation equipment and City's bulk storage tank. Vendor shall only make the connection to the City's storage tank and fill point location in the presence of a member of the on-duty water plant operational staff to prevent accidental discharge of the product into the wrong storage tank(s).
- 3.7. The vendor shall be responsible for any spills resulting from the failure of its or its subcontractor's delivery equipment or from failure of attendant delivery personnel in the proper performance of their duties. Proper performance shall require delivery personnel's constant inspection and observation of unloading operations and knowledgeable response to problems or emergencies, which would most commonly be expected to occur. The City or its designated representative reserves the right to refuse any and all deliveries made with equipment that is poorly maintained and/or leaking. The vendor shall observe the entire filling operation at the water treatment plant site and shall immediately report any spills caused during the filling operations. The vendor shall take immediate and appropriate actions to clean up any spilled citric acid. If the spill is not cleaned up, the City or its designated representative may hire a qualified company to clean up the spill, and the cost of such service will be charged to the vendor and deducted from the amount due to the vendor. If the City's unloading equipment such as pipe, valves or level indication and alarms should fail and the spillage is not the fault of the vendor or its subcontractor, the vendor shall be relieved of cleanup of the spill.
- 3.8. The transporting equipment shall be clean and free of residue that may contaminate the vendor's product or impede the unloading process. It is the vendor's responsibility to verify the cleanliness of the transporting equipment before loading.

All appurtenant valves, pumps, and discharge hoses used for the delivery of citric acid shall be supplied by the vendor and shall be clean and free from contaminating material. The City or its designated representative may reject a load if the equipment is not properly cleaned.

- 3.9. All delivery vehicle drivers shall have a proper commercial driver's license.
- 3.10. Delivery Shipments shall be rejected which fail to meet any of the requirements of this Specification. In the event a delivery shipment is rejected, upon notification to the vendor that the shipment is rejected, vendor shall be required to ship a replacement delivery within twenty-four (24) hours from time of notification. Failure to provide replacement product that meets this Specification within the prescribed time period will constitute failure to comply with the delivery requirements set forth in this document and termination of this purchase order at the discretion of the City.

4. PRODUCT MATERIAL REQUIREMENTS

- 4.1. The citric acid delivered under this specification must conform to the American National Standards Institute/National Sanitation Foundation Institute for Drinking Water Treatment Chemical – Health Effects, ANSI/NSF 60.
- 4.2. The citric acid delivered under this specification must conform to the American National Standards Institute/American Water Works Association standard B200-07 for citric acid or the most current AWWA standard.
- 4.3. The citric acid solution will be prepared so that a homogeneous, well-mix product is received at the City's location as identified in section 3.2 of these specifications.
- 4.4. The chemical and physical properties of the citric acid delivered under this Specification shall be as follows:

▪Appearance:	Clear liquid
▪Purity:	99.85-99.95%
▪pH:	<3
▪Specific Gravity @ 20 deg C:	1.23-1.25
▪Heavy metals (ppm):	<2.5
▪Arsenic (ppm):	<1

5. QUALITY ASSURANCE, SAFETY AND TRAINING

5.1. Sampling and Testing

- 5.1.1. All Sampling and Testing shall be in accordance with AWWA B200-07 standards or latest revision of AWWA's citric acid standard.
- 5.1.2. Sampling Prior to Unloading: The vendor's transportation equipment shall have a sample port to provide a sample for analysis prior to hooking up and transferring the load to the City's bulk storage tank. At the sole discretion of the City, the vendor's delivery personnel (driver) may be asked to provide a sample of citric acid before transferring the load to the City's bulk storage tank. The City will supply the sample container and the driver shall collect the sample from the transportation equipment and turn it over to a City's designated representative. The sample shall be considered representative of the load. The City or its designated reserves the right to subject samples of the citric acid to complete analyses to ensure that it meets these Specifications and AWWA B200-07. Three failures of these Specifications and AWWA B200-07 during any period of this purchase order shall constitute grounds for termination of the vendor's purchase order from City of Granbury.
- 5.1.3. Certified Analysis. Vendor shall supply an affidavit, signed by a corporate designated official, certifying that the citric acid furnished by the vendor, complies with all applicable requirements of this Specification and AWWA Standard B200-07, latest revision.
- 5.1.4. Manufacturer's Laboratory Delivery Reports. A certified report from the manufacturer shall be submitted for each citric acid delivery to the City. The report shall contain the following data:
- Date and time of manufacture
 - Lot number
 - Quantity
 - pH:
 - Specific Gravity @ 20 deg C
 - Purity (%)
 - Heavy metals (ppm)
 - Arsenic (ppm)
- 5.1.5. No deliveries will be accepted by the City or its designated representative unless accompanied by said certified laboratory report for the specific batch

of citric acid delivered showing the above data and that it conforms to the Specification. Failure to comply with this provision three (3) times during the purchase order period shall constitute sufficient grounds for termination of the purchase order from the City.

6. OCCUPATIONAL HEALTH AND SAFETY

6.1. Vendor must ensure delivery personnel's compliance with all OSHA requirements, including personal protective equipment for vendor delivery personnel, including without limitation chemical goggles, transparent face shield and hard hat, rubber gloves, rubber boots, and rubber or plastic-coated fabric apron or slicker suit. Vendor delivery personnel must wear at minimum, chemical goggles and rubber gloves when handling hoses and valves.

7. Safety Data Sheets. Any chemical delivered from the vendor must be accompanied by a Safety Data Sheet (SDS). The SDS must be maintained by the user agency and must include the following information:

- 7.1. The Chemical Name and the common name of the toxic substance
- 7.2. The hazards and other risks in the use of the toxic substance, including:
- 7.3. The potential for fire, explosion, corrosivity and reactivity;
- 7.4. The known acute and chronic health effects of risks from exposure, including the medical conditions which are generally recognized as being aggravated by exposure to the toxic substance; and
- 7.5. The primary routes of entry and symptoms of overexposure.
- 7.6. The proper precautions, handling practices, necessary personal protective equipment, and other safety precautions in the use of, or exposure to, the toxic substances, including appropriate emergency treatment in the case of overexposure.
- 7.7. The emergency procedure for spills, fire, disposal and first aid.
- 7.8. A description, in lay terms, of the known specific potential health risks posed by the toxic substance intended to alert any person reading this information.
- 7.9. The year and month, if available, that the information was compiled and the name, address, and emergency telephone number of the manufacturer responsible for preparing the information.

8. The responsibility for compliance with Federal and State rules and regulations regarding vendor caused spills or releases shall be the sole responsibility of the vendor. The vendor shall indemnify and hold the City harmless for any failure to properly report and /or comply with this provision. In addition, vendor shall bear all expenses of spills, unless caused by the sole negligence of the City or its designated representative.

9. TERMINATION

- 9.1. In addition to the various statements in this Specification stating the grounds for termination of the vendor's purchase order to supply citric acid to the City, and in addition to any other remedies, including the right to obtain cover and charge vendor for the costs of cover vendor's failure to comply with this Specification three (3) times over the duration of this purchase order shall constitute sufficient grounds for termination of the purchase order by the City. These failures any three of which can result in termination of the purchase order, include, but are not limited to, failure to deliver in a timely manner, failure to deliver with proper equipment, failure of the citric acid to meet the Specification at any time, failure to provide a certificate of analysis, failure to comply with the safety and OSHA requirements of the Specification.

10. SECURITY PROVISIONS

- 10.1. All Shippers and vendors shall provide the City or its designated representative with a summary of the actions taken to reduce the possibility of criminal activity during packaging and shipment of products and materials to designated facilities.
- 10.2. All vendors (and their transportation companies) shall send a list of names of representatives that are authorized to enter designated facilities on their behalf. This list will be kept current with any personnel changes being reflected on the list.
- 10.3. All delivery personnel must have a photo ID and appropriate company identification.
- 10.4. All vendors and delivery personnel must sign in and out of designated facilities.
- 10.5. Chemical deliveries will strictly follow the City's or its designated representative's bulk off-loading policy and procedure where applicable.
- 10.6. No unscheduled or after-hours deliveries will be accepted without written or verbal permission from the City or its designated representative.
- 10.7. All deliveries must be made through the main entrance.

END

**TECHNICAL SPECIFICATIONS FOR
SODIUM BISULFITE (39%)
CITY OF GRANBURY**

1. GENERAL

- 1.1. The intent and purpose of this specification (Specification or Specifications) is to provide for the delivery of bulk sodium bisulfite to the City of Granbury, Texas (City) Surface Water Treatment Plant located at 1420 E Pearl, Granbury, TX 76048.
- 1.2. Term of the purchase order period is to begin on October 1, 2021 and end on September 30, 2022 (City's Fiscal Year) for a total of 12 months unless terminated early as provided for in Sections 3.10, 5.1.1, 5.1.4, and 9.1 of this Specification.

2. VENDOR QUALIFICATIONS/SUBMITTALS

- 2.1. Each prospective vendor shall submit a sample of its product representative of their manufacturing process to an approved testing laboratory for analysis. The laboratory shall ascertain purity, specific gravity and pH of prospective vendor's sample. Each prospective vendor shall supply results of the analysis to the City, signed by a corporate designated official. The cost of the analysis shall be borne by vendor. Failure to submit a sample or meet the requirements of the Specification shall result in the vendor being disqualified from this product procurement.
- 2.2. Each prospective vendor shall submit a reference list of a minimum of five (5) customers that use or have used sodium bisulfite for water treatment. Failure to disclose references will be grounds for disqualifying the vendor from this product procurement. Previous performance will be considered as part of the evaluation of quotations.

3. DELIVERY REQUIREMENTS

- 3.1. Vendor shall make deliveries within one (1) business day after receipt of written or verbal order issued by the City or the City's designated representative.
- 3.2. All deliveries of bulk sodium bisulfite shall be freight prepaid, F.O.B. to 1420 E Pearl, Granbury, TX 76048. The site has limited (controlled) access.
 - 3.2.1. The bulk storage tank volume is 550 gallons.
 - 3.2.2. Estimated usage of bulk sodium bisulfite is 4,000-7,000 gallons per year.

- 3.3. Delivery time of day shall be arranged upon placement of order and shall be between the hours of 8:00 A.M. and 4:30 P.M to the Regional Surface Water Treatment Plant. Requests to deviate from this schedule must be confirmed with the City or the City's designated representative 24-hours prior to the scheduled delivery and must conform to the delivery conditions set forth in these specifications.
- 3.4. Packaging and shipment of sodium bisulfite shall conform to all current regulations of the State of Texas, the United States Department of Transportation and all other applicable regulatory agencies.
- 3.5. The City reserves the right to change quantities and delivery dates at its discretion with a 24-hour notice.
- 3.6. The vendor shall be responsible for pumping bulk sodium bisulfite into the storage tank at the water treatment plant site and shall provide all necessary hoses, fittings, pumps, etc. required to safely and efficiently "offload" the sodium bisulfite into designated storage tank. Vendor shall furnish an approved (by City or its designated representative), leak-free connection device between the transportation equipment and City's bulk storage tank. Vendor shall only make the connection to the City's storage tank and fill point location in the presence of a member of the on-duty water plant operational staff to prevent accidental discharge of the product into the wrong storage tank(s).
- 3.7. The vendor shall be responsible for any spills resulting from the failure of its or its subcontractor's delivery equipment or from failure of attendant delivery personnel in the proper performance of their duties. Proper performance shall require delivery personnel's constant inspection and observation of unloading operations and knowledgeable response to problems or emergencies, which would most commonly be expected to occur. The City or its designated representative reserves the right to refuse any and all deliveries made with equipment that is poorly maintained and/or leaking. The vendor shall observe the entire filling operation at the water treatment plant site and shall immediately report any spills caused during the filling operations. The vendor shall take immediate and appropriate actions to clean up any spilled sodium bisulfite. If the spill is not cleaned up, the City or its designated representative may hire a qualified company to clean up the spill, and the cost of such service will be charged to the vendor and deducted from the amount due to the vendor. If the City's unloading equipment such as pipe, valves or level indication and alarms should fail and the spillage is not the fault of the vendor or its subcontractor, the vendor shall be relieved of cleanup of the spill.
- 3.8. The transporting equipment shall be clean and free of residue that may contaminate the vendor's product or impede the unloading process. It is the vendor's responsibility to verify the cleanliness of the transporting equipment before loading.

All appurtenant valves, pumps, and discharge hoses used for the delivery of sodium bisulfite shall be supplied by the vendor and shall be clean and free from contaminating material. The City or its designated representative may reject a load if the equipment is not properly cleaned.

- 3.9. All delivery vehicle drivers shall have a proper commercial driver's license.
- 3.10. Delivery Shipments shall be rejected which fail to meet any of the requirements of this Specification. In the event a delivery shipment is rejected, upon notification to the vendor that the shipment is rejected, vendor shall be required to ship a replacement delivery within twenty-four (24) hours from time of notification. Failure to provide replacement product that meets this Specification within the prescribed time period will constitute failure to comply with the delivery requirements set forth in this document and termination of this purchase order at the discretion of the City.

4. PRODUCT MATERIAL REQUIREMENTS

- 4.1. The sodium bisulfite delivered under this specification must conform to the American National Standards Institute/National Sanitation Foundation Institute for Drinking Water Treatment Chemical – Health Effects, ANSI/NSF 60.
- 4.2. The sodium bisulfite solution will be prepared so that a homogeneous, well-mix product is received at the City's location as identified in section 3.2 of these specifications.
- 4.3. The chemical and physical properties of the sodium bisulfite delivered under this Specification shall be as follows:

▪Appearance:	Pale yellow, clear liquid
▪NaHSO ₃ (%):	38.0-41.0
▪pH:	4.0-5.0
▪Specific Gravity @ 20 deg C:	1.215-1.235
▪Iron as Fe (ppm):	<5
▪Sulfur Dioxide (% as SO ₂):	23.0-26.0

5. QUALITY ASSURANCE, SAFETY AND TRAINING

5.1. Sampling and Testing

- 5.1.1. Sampling Prior to Unloading: The vendor's transportation equipment shall have a sample port to provide a sample for analysis prior to hooking up and transferring the load to the City's bulk storage tank. At the sole discretion of the City, the vendor's delivery personnel (driver) may be asked to provide a

sample of sodium bisulfite before transferring the load to the City's bulk storage tank. The City will supply the sample container and the driver shall collect the sample from the transportation equipment and turn it over to a City's designated representative. The sample shall be considered representative of the load. The City or its designated reserves the right to subject samples of the sodium bisulfite to complete analyses to ensure that it meets these Specifications. Three failures of these Specifications during any period of this purchase order shall constitute grounds for termination of the vendor's purchase order from City of Granbury.

5.1.2. Certified Analysis. Vendor shall supply an affidavit, signed by a corporate designated official, certifying that the sodium bisulfite furnished by the vendor, complies with all applicable requirements of this Specification.

5.1.3. Manufacturer's Laboratory Delivery Reports. A certified report from the manufacturer shall be submitted for each sodium bisulfite delivery to the City. The report shall contain the following data:

- Date and time of manufacture
- Lot number
- Quantity
- NaHSO₃ (%)
- pH
- Specific Gravity @ 20 deg C
- Iron as Fe (ppm)
- Sulfur Dioxide (% as SO₂)

5.1.4. No deliveries will be accepted by the City or its designated representative unless accompanied by said certified laboratory report for the specific batch of sodium bisulfite delivered showing the above data and that it conforms to the Specification. Failure to comply with this provision three (3) times during the purchase order period shall constitute sufficient grounds for termination of the purchase order from the City.

6. OCCUPATIONAL HEALTH AND SAFETY

6.1. Vendor must ensure delivery personnel's compliance with all OSHA requirements, including personal protective equipment for vendor delivery personnel, including without limitation chemical goggles, transparent face shield and hard hat, rubber gloves, rubber boots, and rubber or plastic-coated fabric apron or slicker suit. Vendor delivery personnel must wear at minimum, chemical goggles and rubber gloves when handling hoses and valves.

7. Safety Data Sheets. Any chemical delivered from the vendor must be accompanied by a Safety Data Sheet (SDS). The SDS must be maintained by the user agency and must include the following information:
 - 7.1. The Chemical Name and the common name of the toxic substance
 - 7.2. The hazards and other risks in the use of the toxic substance, including:
 - 7.3. The potential for fire, explosion, corrosivity and reactivity;
 - 7.4. The known acute and chronic health effects of risks from exposure, including the medical conditions which are generally recognized as being aggravated by exposure to the toxic substance; and
 - 7.5. The primary routes of entry and symptoms of overexposure.
 - 7.6. The proper precautions, handling practices, necessary personal protective equipment, and other safety precautions in the use of, or exposure to, the toxic substances, including appropriate emergency treatment in the case of overexposure.
 - 7.7. The emergency procedure for spills, fire, disposal and first aid.
 - 7.8. A description, in lay terms, of the known specific potential health risks posed by the toxic substance intended to alert any person reading this information.
 - 7.9. The year and month, if available, that the information was compiled and the name, address, and emergency telephone number of the manufacturer responsible for preparing the information.
8. The responsibility for compliance with Federal and State rules and regulations regarding vendor caused spills or releases shall be the sole responsibility of the vendor. The vendor shall indemnify and hold the City harmless for any failure to properly report and /or comply with this provision. In addition, vendor shall bear all expenses of spills, unless caused by the sole negligence of the City or its designated representative.
9. TERMINATION
 - 9.1. In addition to the various statements in this Specification stating the grounds for termination of the vendor's purchase order to supply sodium bisulfite to the City, and in addition to any other remedies, including the right to obtain cover and charge vendor for the costs of cover vendor's failure to comply with this Specification three (3) times over the duration of this purchase order shall constitute sufficient grounds for termination of the purchase order by the City. These failures any three of which can result in termination of the purchase order, include, but are not limited to, failure to deliver in a timely manner, failure to deliver with proper equipment, failure of the sodium bisulfite to meet the Specification at any time, failure to provide a certificate of analysis, failure to comply with the safety and OSHA requirements of the Specification.

10. SECURITY PROVISIONS

- 10.1. All Shippers and vendors shall provide the City or its designated representative with a summary of the actions taken to reduce the possibility of criminal activity during packaging and shipment of products and materials to designated facilities.
- 10.2. All vendors (and their transportation companies) shall send a list of names of representatives that are authorized to enter designated facilities on their behalf. This list will be kept current with any personnel changes being reflected on the list.
- 10.3. All delivery personnel must have a photo ID and appropriate company identification.
- 10.4. All vendors and delivery personnel must sign in and out of designated facilities.
- 10.5. Chemical deliveries will strictly follow the City's or its designated representative's bulk off-loading policy and procedure where applicable.
- 10.6. No unscheduled or after-hours deliveries will be accepted without written or verbal permission from the City or its designated representative.
- 10.7. All deliveries must be made through the main entrance.

END