

TERMS AND CONDITIONS
LM #05-23
ODOR AND CORROSION CONTROL
WASTEWATER TREATMENT PLANT

1. Specifications and bidding documents may be secured from the City of La Marque website at: www.bids.cityoflamarque.org
2. The City reserves the right to reject any or all bids and to waive informalities in bidding. In case of ambiguity or lack of clearness in stating the prices in any bid, the owner reserves the right to consider the most advantageous thereof, or to reject the bid. The award will be made to the responsible bidder submitting the lowest acceptable bid.
3. It shall be a breach of ethics to offer, give or agree to give any employee or former employee of the City of La Marque, or for any employee or former employee of the City of La Marque to solicit, demand, accept or agree to accept from another person, a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, preparation of any part of a program requirement or purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter pertaining to any program requirement or a contract or subcontract, or to any solicitation or proposal therefore pending before the City of La Marque.
4. It shall be a breach of ethics for any payment, gratuity or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor or higher tier subcontractor for any contract for The City of La Marque, or any person associated therewith, as an inducement for the award of a subcontract or order.
5. Before submitting a bid, each bidder must (a) examine the contract document thoroughly, (b) visit the site to familiarize himself with local conditions that may in any manner affect cost, progress or performance of the work (c) familiarize himself with federal, state and local laws, ordinances, rules and regulations that may in any manner affect cost, progress or performance of the work and (d) study and carefully correlate bidder's observations with this bid packet.
6. The submission of a bid will constitute an incontrovertible representation by the bidder that he has complied with every requirement scope and detail to indicate and convey understanding of all terms and conditions for performance of the work.
7. Bids will be rejected if:
 - A. It is received after the advertised closing date and time for receipt of bids.
 - B. It is submitted on a bid proposal form other than that provided by the City; is not completely filled in, is incomplete, conditional, or obscure or that contains any additions not called for in the specifications.

8. **PRICE OF MATERIALS AND SALES TAX:** This contract is issued by an organization which qualifies for exemption pursuant to the provision of Article 20.04 (f) of the Texas Limited Sales, Excise, and the use tax act. The contractor performing this contract may purchase, rent, or lease all materials, supplies, equipment used or consumed in the performance of this contract by issuing to his supplier an exemption certificate in lieu of the tax, said exemption certificate complying with the State Comptroller's Ruling No. 95-0.07. Any such exemption shall be subject to the provisions of the State Comptroller's Ruling Number 95-0.09 as amended to be effective October 2, 1968.
9. The City reserves the right to revise or amend the specifications prior to the date set for opening bids. Such revisions or amendments if any will be announced by addenda or addendum to these specifications. Copies of such addenda so issued will be furnished to all prospective bidders.
10. Unit price should reflect all charges, i.e., bid unit price, quantity specified and the total charges. In case of errors in the extension, the **unit price will govern the bid.**
11. No payment will be made to the contractor until all material is approved and accepted to the satisfaction of the city, payment on invoice will then be net 30 days.
12. Bids cannot be altered or amended after the opening time. Any alterations made before opening time must be initialed by the bidder or his authorized agent. No bid may be withdrawn after opening without approval and based on a written acceptable explanation.
13. A catalog, brand name or manufacturers referenced used in the bid invitation is **DESCRIPTIVE NOT RESTRICTIVE**; it is to indicate type and quality desired. Bids on brand of like nature will be considered. If bidding on other than referenced specifications, bidder must show manufacture, brand or trade name, lot number, etc., of the article offered.
14. **CONTRACT TERM:** This contract will be for a period of one (1) year beginning **October 1, 2022**. The city must obtain prices early in order to prepare for the upcoming fiscal year budget. After the initial 12-month term, the agreement may be renewed on a monthly basis and may be negotiated for an additional one-year term with the mutual consent of both parties, 30 days prior to the expiration of the initial agreement. The Contractor must supply the City with all dates and information supporting all price changes to the City Council for approval. Either party may terminate agreement within 30 days' notice in writing to the other party.
15. The vendor hereby assigns to purchaser any and all claims for over-charges associated with this contract which arise under the Antitrust Laws of the United States, 15 U.S.C.A., ¶ 1, ET. Seq. (1973).

16. The City of La Marque reserves the right to award all sections to a single bidder or separate bidders.
17. Bids received after the closing time will be returned unopened.
18. All shipping and delivery charges to be paid by supplier and delivered to the City's Lift Stations listed as follows: 1764 L.S. Mark 45 - 6090 FM 1764, Volney L.S. - 1111 Volney and 6th St. L.S. - 2500 6th Avenue.
19. It shall be a breach of ethics for any payment, gratuity or offer of employment to be made by or on behalf of a subcontractor for any contract for the City of La Marque, or any person associated therewith, as an inducement for the award of a subcontract or order.
20. The responder shall not accept or offer gifts or anything of value nor enter into any business arrangement with any employee, official, or agent of the City of La Marque.

PRICE REVISION CLAUSE:

Whenever possible, the City desires firm prices for the full contract period. It is recognized by the City that qualified bidders may be unwilling to guarantee each category of unit prices during the entire period of this contract because of price changes from the bidder's source of supply.

In such instances, an asterisk (*) must be placed by the item or items which the bidder is unwilling to guarantee the price for the full contract period, and the partial period of the contract price should be noted on a separate sheet. Such items will be subject to price changes due to increases or decreases in cost from the bidder source of supply during the term of the contract.

INCREASES: Permissible price revisions in any event shall not exceed the actual unit cost or percentage cost revisions from the bidder's source of supply. It will ordinarily be the policy of the City to accept price increases which have been noted in the bid proposal when the amount of such increase is reasonable and does not exceed the limit set out in the preceding sentence. However, the city reserves the right to obtain a different source of items which have been increased in price.

DECREASES: If a vendor does take advantage of this "price revision clause", the City will expect any decreases in cost from the bidder's source of supply during the term of the contract to lower the City's price for such item or items.

NOTE: The City must have thirty (30) days written notice prior to any increase or decrease in existing prices.

A bid will not be considered where there is not price information offered, nor can bids be considered where prices in effect at the time of shipment are offered.

PART 1 - GENERAL

SCOPE

- A. The contractor (bidder) will provide a turnkey comprehensive odor control system and corrosion control program including all storage and feed equipment, chemicals, operation, monitoring, and maintenance necessary to achieve the odor control goals of the City of La Marque. Work under this section includes complete chemical feed systems for the control of hydrogen sulfide. The systems shall consist of a feed system composed of chemical feed pumps, feed controls, liquid storage tanks, all piping and appurtenances required to feed Aqueous Solution of Ferrous and Ferric Sulfate into the wastewater system. All materials shall be provided in accordance with these specifications. The equipment to provide odor and corrosion control will be provided at the expense of the successful bidder who shall maintain ownership, operation, and maintenance of said equipment as describe here in.
- B. All components of the system shall be compatible with the conditions and chemicals to which they are subjected to during the normal operation of the system. Compounds with which the materials must be compatible include, but are not limited to:
1. Hydrogen Sulfide
 2. Aqueous Solution of Ferrous and Ferric Sulfate or approved equal solution.

PROCESS DESCRIPTION

The system shall provide for bulk storage and metering of the bulk storage tank to the wastewater collection system. The system shall contain controls as necessary to facilitate variation in feed rates over a 24-hr period. A calibration cylinder shall be permanently installed to facilitate calibration of feed pumps.

The material shall remove hydrogen sulfide from the liquid stream via chemical precipitation. The material shall provide a source of ferrous iron, which will cause the sulfide to precipitate as ferrous sulfide, thus preventing it from being liberated into the gaseous phase. By treating hydrogen sulfide in the wastewater stream, the process shall prevent the release of hydrogen sulfide into the air, reducing odors and corrosion.

This system shall be capable of removing the hydrogen sulfide in solution to a level of less than 0.5 ppm.

PART 2 - PRODUCTS

CHEMICAL PRODUCT INFORMATION

- A. The material supplied shall be an aqueous solution of ferrous and ferric sulfate containing a minimum of 1.1 pounds of iron per gallon.
- B. The material shall be capable of reducing the dissolved hydrogen sulfide concentration in wastewater to less than 0.5 mg/L.
- C. The material shall be free of any objectionable odor-producing compounds

CHEMICAL STORAGE TANK - SPECIFICATIONS

CHEMICAL FEED CONTROLS

- A. General. The operation of the Chemical Feed System shall be controlled from a Control Panel. All equipment control switches, pilot lights, controllers, etc. and the chemical feed pumps shall be housed in this panel. The control system shall be UL Approved and shall bear the UL Listed Enclosed Industrial Control Panel Label.
- B. Enclosure. The control panel enclosure shall be constructed of 316 stainless steel and shall be rated NEMA 3R. It shall be equipped with a door with a continuous hinge. The hinged door shall have two latches and shall be capable of locking via a padlock. The enclosure shall be mounted on the control stand, which shall contain the calibration stand.
- C. Components. The Control Box Shall Contain the following:
 - 2- 24 Hour Time Clocks
 - 1- 15 Amp Circuit Breaker, 115 volts
 - 1- Ground Fault Receptacle
 - 5- On/Off Switches with LED Indicator Lights
 - 2- Chemical Feed Pumps
 - 1- Cooling Fan
 - 2- Dry Contact to Receive Signal from Remote Source
- D. Controls Layout. All manually operated controls (control switches, pilot lights, etc.) shall be located on a panel behind the enclosure door. The panel shall be outfitted with a main power disconnect located in the Control Stand.
- E. Standards. All control system design, fabrication, and wiring shall conform to the standards of Underwriter's Laboratories, National Electrical Code, and any other applicable federal, state, or local codes.
- F. System Operation. Chemical Feed Pumps. The bellows pump shall be controlled by a three-position HAND/OFF/AUTO switch. When in the AUTO position the pump shall be controlled by a timer. The timer shall turn the pump on and off based upon preset time intervals. When in the HAND position the pump shall run, regardless of the preset time interval. Either one or both chemical feed pumps may turn on or off at preset speeds and preset times.
- G. Control Stand. Pump control box shall be mounted on a 316-stainless steel pedestal.

1. Calibration Cylinder. The stand shall be used to house a calibration cylinder used to measure the chemical being injected into the system. A 3-way valve shall be located at the top and bottom of the calibration tube to facilitate flow measurement. Access inside this pedestal shall be accomplished through a door located on the front of the pedestal. Instructions for use of this cylinder shall be permanently affixed to the interior of the enclosure.
 2. Disconnect Switch. A main power disconnect shall be located in the control stand.
- H. All chemical feed tanks may range in size from 4000 gallons up to 6500 gallons. Tank sizes are dependent on feed rates and site constraints to help cut down on number of residential deliveries.

CHEMICAL FEED PUMPS

1. **GENERAL.** Provide Siemens Industry, Inc. or approved equal Bellows Pump(s) as shown on the following table. Each pump shall include motor, base, sealed bearings, flexible coupling and check valve filters.

Quantity	Model No.	Adjustable Flow Rate Range (mL/min)	Max Discharge Pressure (psi)
2	15907-002	12-120	40

2. **PERFORMANCE.** Pump rates and maximum discharge pressures shall be in accordance with the table above.
 - a. The pumps shall be self-priming capable of suction lifts, when dry, up to seven (7) feet, and with bellows full, they will prime up to twenty (20) feet.
 - b. Flow rate of each pump shall be adjustable by (a) diameter of bellows, and (b) adjustment of stroke length. A calibration cylinder and valves will be installed to calibrate pump feed rates.
 - c. Pump suction and discharge shall be 3/8" ID polypropylene barbed connection for "T" tubing. A 1-1/2" wye strainer will be installed.

3. **CONSTRUCTION.**

Material Reference

Bellows
Poppet valves
O-rings
Springs

Material

Polypropylene
EPT®
EPT®
Hastelloy C

4. **MOTORS.** Motor shall be totally enclosed 115 volts, 60 Hz, 0.034 HP, single-phase and shall be rated for continuous duty.

PIPING & APPURTENANCES

- A. All discharge piping shall be standard ½", Polyethylene Tubing. All secondary piping shall be 2", Schedule 40 PVC. All valves, fittings, and connectors shall be Schedule 80 PVC.
- B. All suction piping shall be standard ½", Schedule 80 PVC. All valves, fittings, and connectors shall be Schedule 80 PVC.
- C. All fill line piping shall be 2" Schedule 80 PVC. All secondary piping shall be 4" Schedule 40 PVC. All fill line valves, fittings, and connectors shall be Schedule 80 PVC.
- D. Fill line shall have a 2" stainless steel male camlock with a 2" plastic female camlock cap.
- E. All chemical feed seals shall be compatible with the chemicals to be used in the regular operation, maintenance, and cleaning of the feed system.
- F. All fittings shall be solvent-welded or threaded.
- E. Contractor must install chemical feed discharge lines so that the product is injecting directly into the waste streams and not onto structures or equipment

PART 3 - EXECUTION

SITE AND UTILITIES

The feed system, tanks, and other appurtenances shall be located on a foundation, or approved equal. The following utilities shall be provided at the feed system site and located as shown on the drawing.

- A. Electrical. One 120 VAC, 60 Hz, 15-amp single-phase electrical service shall be required.
- B. Drain. A minimum 2-inch PVC gravity pad drain to sewer is recommended.

INSTALLATION

The system shall be installed in accordance with the manufacturer's instructions. All installation personnel shall be trained and qualified in the areas of plumbing, electrical work, and instrumentation as required to complete the installation.

PART 4 - SERVICE

SCHEDULED SERVICES AND SITE VISITS REQUIRED

1. Site visits to each odor control feed system and control point will be made quarterly to maintain acceptable operation and to meet the odor control goals established by (Customer name). This frequency is no less than once per quarter.
2. At each visit, the following task will be performed at a minimum:
 - a. Measure and record dissolved sulfides, H₂S, ph, and temperature as appropriate at each control point for liquid phase odor control systems. Adjust dosing profile as necessary to meet performance objectives.
 - b. Check operation and calibration of dosing equipment at each feed system.
 - c. Calibrate/troubleshoot/repair chemical feed systems as necessary.
1. Routinely perform extensive odor surveys when these services are required by (Customer name) to identify sources of excessive loadings or collection line odor problems. Have the capabilities to collect the following types of data at a minimum: grab samples of vapor phase hydrogen sulfide, mercaptans, amines, ammonia, and other odorous compounds; continuous sampling and data logging of vapor phase hydrogen sulfide; grab and continuous sampling of liquid phase dissolved sulfide, ph (Sonde Meter), temperature, and ORP (Sonde Meter). This sampling also includes routine/quarterly, 24-hour profile sampling of the force mains flowing to the WWTP for dissolved sulfide. Own and maintain the equipment to carry out these surveys including Detection Instruments Odalog H₂S monitor/data logger, Arizona Instruments Jerome H₂S monitor, ISCO's 24-hour liquid samplers, Gastec's hand sampling (vapor) pumps as well as various ph meters (Sonde pH Meter) and other sampling equipment.
2. Capability to remotely monitor the City of La Marque odor control chemical tank levels via a website to ensure uninterrupted services on liquid phase odor control systems.
3. In addition to the tasks described above, any and all calibration, lubrications, or other maintenance shall be performed in accordance with the methods and frequency specified by the Equipment Manufacturer.

EMERGENCY/ODOR COMPLAINT RESPONSE REQUIREMENTS

1. Must be capable of providing 24-hour response to any emergency repairs needed or odor complaints.
2. Must have at a minimum, (1) one service technician residing within 40 miles of the City of La Marque. Technicians must have fully stocked trucks with parts and equipment for repairs and the services stated above. Must have a local Service Center located in Texas within 200 miles of the City of La Marque.

3. Service center must be fully equipped for manufacturing feed equipment with spare pumps, tanks, and parts for feed equipment supplied for this contract. Must have a minimum of 2 engineers on staff, 1 must be a chemical engineer.

RESPONSIBILITY OF (CUSTOMER NAME):

1. The City of La Marque will not provide equipment to assist the successful bidder in unloading the equipment for each feed location. A firm level pad will be provided by the City of La Marque for the storage tank and feed equipment. A 120 volt 20-amp electrical service will be provided for the vender to connect the chemical feed system. Should a larger electrical service be required, it will be at the expense of the contractor. The City of La Marque will pay for the electrical usage.
2. A water service will be provided at each feed location and the water bill shall be paid by the City of La Marque. On the bid tab sheet, the vender will show the total electrical and water usage projected per year for all equipment.

QUALIFICATIONS REQUIRED:

1. Contractor must have at least 10 years' experience in the manufacturing and servicing of both liquid and vapor phase technology equipment. Contractor must have at least 5 current odor control contracts, with references, for a minimum of 5 years in the state of Texas that are similar in size and magnitude, or larger than the City of La Marque proposed project.

**PROPOSAL
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Estimated Quantity	Amount per Gallon Aqueous Solution of Ferrous and Ferric Sulfate	*Total Price
90,000 Gallons	\$	\$
Mobilization of Equipment	\$	\$
De-Mobilization of Equipment	\$	\$

***Price should include any shipping and/or delivery fees.**

****Deliveries may be split between two different site locations.**

SIGNATURE PAGE
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BY SIGNATURE HEREON AFFIXED, the bidder certifies neither the bidder nor the firm, corporation, partnership, or institution represented by the bidder or anyone acting for such firm, corporation, or the institution has violated the Antitrust Laws and Commerce Code, or the Federal Antitrust, nor communicated directly or indirectly the bid made to any competitor or any other person engaged in such line of business.

Total Amount of Bid \$ _____

Company Name

Signature

Printed Name & Title

Address

City, State and Zip

Phone

Fax

Date

Acknowledgement of any and all addendums received:

Addendum #1 _____

Addendum #2 _____