



City of Killeen  
**Purchasing**  
Lorianne Luciano, Director of Procurement  
802 N 2nd St, Killeen, TX 76541

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## [LONESTAR MAINTENANCE & SERVICE INC.] RESPONSE DOCUMENT REPORT

BID No. 24-44

Chlorine Room Build and Rebuilds

RESPONSE DEADLINE: August 14, 2024 at 2:00 pm

Report Generated: Wednesday, August 14, 2024

### Lonestar Maintenance & Service Inc. Response

#### CONTACT INFORMATION

**Company:**  
Lonestar Maintenance & Service Inc.

**Email:**  
[tonya@lonestarmaintenance.com](mailto:tonya@lonestarmaintenance.com)

**Contact:**  
Tonya Kolar

**Address:**  
PO Box 519

Lorena, TX 76655

**Phone:**  
(254) 857-9711

**Website:**  
[www.lonestarmaintenance.com](http://www.lonestarmaintenance.com)

**Submission Date:**  
Aug 14, 2024 1:59 PM

## ADDENDA CONFIRMATION

Addendum #1  
*Confirmed Aug 13, 2024 9:27 PM by Tonya Kolar*

Addendum #2  
*Confirmed Aug 13, 2024 9:27 PM by Tonya Kolar*

## QUESTIONNAIRE

### 1. Conflict of Interest Questionnaire (Form CIQ)\*

Please download the below documents, complete, and upload.

- [Conflict of Interest Questi...](#)

CIQ\_8.13.24.pdf

### 2. References\*

Bidders shall submit at least three (3) businesses as references of the proposed item, with addresses, telephone numbers and contact persons.

Please download the below documents, complete, and upload.

- [References.pdf](#)

References\_8.13.24.pdf

### 3. Certificate of Interested Parties (Form 1295)\*

If awarded, vendor must submit the Certificate of Interested Parties Form 1295 online.

Texas Government Code Section 2252.908 requires that parties contracting with governmental entities submit a disclosure of interested parties form for contracts entered into after January 1, 2016. Successful bidders shall electronically submit the form at the

following website: [https://www.ethics.state.tx.us/whatsnew/elf\\_info\\_form1295.htm](https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm) and provide the City with a certified copy prior to Council approval of the award.

Please confirm that you shall file the Certificate of Interested Parties (Form 1295) if awarded the contract.  
Confirmed

**4. Acknowledgement – “Boycott Israel”\***

By submitting this proposal the vendor hereby verifies that it does not boycott Israel and will not boycott Israel during the term of this contract. Boycotting Israel is defined in Texas Government Code section 808.001 to mean refusing to deal with, terminating business activities with, or taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made for ordinary business purposes.

Confirmed

**5. Acknowledgement – “Boycott Energy Companies”\*\***

By submitting this proposal the vendor hereby verifies that it does not boycott energy companies and will not boycott energy companies during the term of the contract. “Boycott energy company” is defined in Texas Government Code section 809.001 to mean, without an ordinary business purpose, refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations with a company because the company: (A) engages in the exploration, production, utilization, transportation, sale, or manufacturing of fossil fuel-based energy and does not commit or pledge to meet environmental standards beyond applicable federal and state law; or (B) does business with a company described by Paragraph (A).

Confirmed

**6. Acknowledgement – “Prohibition on contracts with companies that discriminate against firearm and ammunition industries”\***

By submitting this proposal the vendor hereby verifies that it does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association and will not discriminate during the term of the contract against a firearm entity or firearm trade association. Discriminate against a firearm entity or a firearm trade association are defined in Texas Government

Code section 2274.001 as (A) with respect to the entity or association, to (i) refuse to engage in the trade of any goods or services; (ii) refrain from continuing an existing business relationship; (iii) terminate an existing business relationship; or (iv) otherwise express a prejudice against the entity or association; and (B) does not include the established policies of a merchant, retail seller, or platform that restrict or prohibit the listing or selling of ammunition, firearms, or firearm accessories.

Confirmed

**7. Antitrust Law Certification\***

The vendor hereby certifies that neither the vendor nor the entity represented by the vendor, or anyone acting for such entity has violated the antitrust laws of the State of Texas, codified in Section 15.01 et seq., Texas Business and Commerce Code, or the Federal antitrust laws, nor communicated directly or indirectly, prior to the solicitation opening with any competitor or any other person engaged in such line of business.

No

**8. Litigation Disclosure\***

Have you or any member of your Firm or Team to be assigned to this engagement ever been indicted or convicted of a felony or misdemeanor greater than a Class C in the last five (5) years?

No

**9. Has the owner(s) of the company been convicted of a crime within the past 10 years?\***

No

**10. Has the company been in bankruptcy, reorganization, or receivership in the last 5 years?\***

No

**11. Has the company provided continuous services as requested in this solicitation and operated in this capacity for two (2) years without interruption? \***

Yes

12. Has the company been disqualified or debarred by any public agency, including the Federal Government, from participation in public contracts?\*

No

13. Does any City of Killeen employee or official have any financial or other interest in your company?\*

No

14. Can service be accomplished as specified in the specifications?\*

Yes

15. When can service commence after award (number of days)?\*

14 days

16. Point of contact to resolve issues (delivery or invoice):\*

Please provide the name, title, address, email, and phone number of contact.

Tonya Kolar, Administrator

PO Box 519, Lorena, TX 76655 / 16418 S. IH35, Bruceville, TX 76630

[tonya@lonestarmaintenance.com](mailto:tonya@lonestarmaintenance.com)

254-857-9711 / 254-339-4260 cell

17. Cooperative Governmental Purchasing Notice\*

Other governmental entities maintain interlocal agreements with the City, may desire, but are not obligated, to purchase goods and services defined in this ITB from the successful Bidder. All purchases by governmental entities, other than the City, will be billed directly to and paid by that governmental entity. The City will not be responsible for another governmental entity's debts. Each governmental entity will place their own orders with the successful Bidder and be responsible for ensuring full compliance with the ITB specifications. Prior to other governmental entities placing orders, the City will notify the successful Bidder of their intent.

Please indicate below if you will permit other governmental entities to purchase from your agreement with the City.

Yes

**18. Copyrighted Material\***

Texas Public Information Act

Steps to Assert Information Confidential or Proprietary

All bids or proposals, data, and information submitted to the City of Killeen are subject to release under the Texas Public Information Act ("Act") unless exempt from release under the Act. You are not encouraged to submit data and/or information that you consider to be confidential or proprietary unless it is absolutely required to understand and evaluate your submission.

On each page where confidential or proprietary information appears, you must label the confidential or proprietary information. Do not label every page of your submission as confidential as there are pages (such as the certification forms and bid sheet with pricing) that are not confidential. It is recommended that each page that contains either confidential or proprietary information be printed on colored paper (such as yellow or pink paper). At a minimum the pages where the confidential information appears should be labeled and the information you consider confidential or proprietary clearly marked.

Failure to label the actual pages on which information considered confidential appears will be considered as a waiver of confidential or proprietary rights in the information.

In the event a request for public information is filed with the City which involves your submission, you will be notified by the City of the request so that you have an opportunity to present your reasons for claims of confidentiality to the Texas Attorney General.

The proposal/bid submitted to the City contains NO confidential information and may be released to the public if required under the Texas Public Information Act.

**19. If your proposal contains confidential information identify where it is located.**

Where in your proposal is the confidential information? Please be specific.

NA

**20. Does bidder maintain insurance as specified herein (see insurance requirements within the specifications and terms and conditions)?\***

Answer YES or

If your answer is NO, then please describe the differences here.

YES

**21. Indicate the company's first year of business operation:\***  
1978

**22. Insurance Broker Information\***

Please provide your Insurance Broker's Name, contact name, phone number, fax number, and email address.

Bailey Insurance, John Pegram

[john@baileyinsurance.com](mailto:john@baileyinsurance.com)

Office: 254.292.1936 | Cell: 972.342.3344

**23. Are there claims that are pending against this insurance policy?\***

Answer No or

If yes, please describe:

No

**24. List the most recent sales that you have with other public agencies, if any, and/or other customers (up to five) regarding a said materials / project:\***

City of Hewitt, City of Waco, City of Woodway, City of Copperas Cove, Texas Parks and Wildlife, City of Gatesville

**25. Emergency Business Service Contact Notice\***

During a natural disaster, or homeland security event, there may be a need for the City of Killeen to access your business for products or services after normal business hours and/or holidays. The City may request City employee pick up or vendor delivery of product or services

For this purpose, a primary and secondary emergency contact name and phone number are required. It is critical the vendor's emergency contact information remains current. City shall be contacted by E-mail with any change to a contact name or phone number of these emergency contacts. Updates may be emailed to [lluciano@killeentexas.gov](mailto:lluciano@killeentexas.gov)

All products or services requested during an emergency event are to be supplied as per the established contract prices, terms, and conditions. The vendor shall provide the fee (pricing) for an after-hours emergency opening of the business, if any. In general, orders will be placed using a City of Killeen procurement card (Master Card) or City issued Purchase Order. The billing is to include the emergency opening fee, if applicable.

Please download the below documents, complete, and upload.

- [Emergency Business Service ...](#)

Emergency\_Business\_Service\_Contact\_Notice\_8.13.24.pdf

**26. Proposal Documents\***

**Please Upload your COMPLETE Proposal here.**

Pump\_Station\_4\_8.13.24.pdf

Rodeo\_8.13.24.pdf

Bundrant\_8.13.24.pdf

SUPERIOR-CL-16-Product-Data-Bulletin.pdf

SUPERIOR-Gas\_Detector\_Sellsheet\_Gas\_Detector\_SLD-1-2\_2020.pdf

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**PRICE TABLES**

[LONESTAR MAINTENANCE & SERVICE INC.] RESPONSE DOCUMENT REPORT  
 BID No. 24-44  
 Chlorine Room Build and Rebuilds

| Line Item    | Description                         | Quantity | Unit of Measure | Unit Cost   | Total              |
|--------------|-------------------------------------|----------|-----------------|-------------|--------------------|
| 1            | Pump Station #4 - Rebuild           | 1        | LS              | \$8,072.00  | \$8,072.00         |
| 2            | Bundrant Pump Station - Rebuild     | 1        | LS              | \$14,025.00 | \$14,025.00        |
| 3            | Rodeo Pump Station – Complete Build | 1        | LS              | \$40,765.00 | \$40,765.00        |
| <b>TOTAL</b> |                                     |          |                 |             | <b>\$62,862.00</b> |

# CONFLICT OF INTEREST QUESTIONNAIRE

# FORM CIQ

## For vendor doing business with local governmental entity

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

### OFFICE USE ONLY

Date Received

1 Name of vendor who has a business relationship with local governmental entity.

Lonestar Maintenance & Service Inc.

2  Check this box if you are filing an update to a previously filed questionnaire. (The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 Name of local government officer about whom the information is being disclosed.

\_\_\_\_\_  
Name of Officer

4 Describe each employment or other business relationship with the local government officer, or a family member of the officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship with the local government officer. Complete subparts A and B for each employment or business relationship described. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer or a family member of the officer receiving or likely to receive taxable income, other than investment income, from the vendor?

Yes  No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer or a family member of the officer AND the taxable income is not received from the local governmental entity?

Yes  No

5 Describe each employment or business relationship that the vendor named in Section 1 maintains with a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more.

6  Check this box if the vendor has given the local government officer or a family member of the officer one or more gifts as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.003(a-1).

7 Jonya Kolar  
Signature of vendor doing business with the governmental entity

8/13/24  
Date

## REFERENCES

Please provide three references:

### Reference No. 1

Company Name Chemical Injection Technologies  
Address 835 Edwards Rd.  
Fort Pierce, FL 34982  
Type of Business Superior Chlorination Equipment Manufacturer  
Contact Person Bob Fraum  
Email Address bob@chlorinators.com  
Telephone and Fax #'s 772-461-0666  
Date and Type of Service(s) Provided Superior Chlorination Equipment Sales & Service, we are a distributor

### Reference No. 2

Company Name PVS / DXI (Formerly DPC Industries)  
Address PO Box 674938  
Dallas, TX 75267  
Type of Business Chemical Supplier  
Contact Person Kurt Filer / Gary Little  
Email Address kfiler@dxgroup.com / glittle@dxgroup.com  
Telephone and Fax #'s 817-641-4712  
Date and Type of Service(s) Provided Chlorine Gas Supplier

### Reference No. 3

Company Name Chameleon Industries  
Address PO Box 853027  
Mesquite, TX 75185  
Type of Business Chemical Supplier  
Contact Person Chino Garza  
Email Address figarza@hotmail.com  
Telephone and Fax #'s 972-880-1493  
Date and Type of Service(s) Provided LAS Supplier

**Emergency Business Service Contact Notice**

During a natural disaster, or homeland security event, there may be a need for the City of Killeen to access your business for products or services after normal business hours and/or holidays. The City may request City employee pick up or vendor delivery of product or services

For this purpose, a primary and secondary emergency contact name and phone number are required. It is critical the vendor's emergency contact information remains current. City shall be contacted by E-mail with any change to a contact name or phone number of these emergency contacts. Updates may be emailed to [lluciano@killeentexas.gov](mailto:lluciano@killeentexas.gov)

All products or services requested during an emergency event are to be supplied as per the established contract prices, terms, and conditions. The vendor shall provide the fee (pricing) for an after-hours emergency opening of the business, if any. In general, orders will be placed using a City of Killeen procurement card (Master Card) or City issued Purchase Order. The billing is to include the emergency opening fee, if applicable.

The contractor shall provide the names, phone numbers and fee (pricing), if any, for an after-hour's emergency opening of the business listed below.

Business Name: Lonestar Maintenance & Service Inc.

Contract #: Project 22-44

Description: Chlorine Room Builds and Rebuilds

Primary Contact (Name): Tonya Kolar

Primary Contact Phone Numbers: Home: (254) 709-0787 Cell: (254) 339-4260

Secondary Contact (Name): Justin Harrison

Secondary Contact Phone Numbers: Home: (254) 709-6130 Cell: (254) 709-2486

After Hours emergency opening fee, if applicable: \$ 200.00



PO BOX 519 LORENA, TX 76655

# Quote

|           |            |
|-----------|------------|
| Date      | Estimate # |
| 8/13/2024 | 0405       |

|   |
|---|
| Name / Address  |
| City of Killeen Water & Sewer Dept<br>Attn: Deanna Lathrop<br>805 W Jasper Dr<br>KILLEEN, TX 76542-1325 |

|  |
|--|
| Ship To  |
| City of Killeen<br>c/o WATER & SEWER DEPT<br>1901 Botanical Drive<br>KILLEEN, TX 76542 |

| Item     | Description  | Qty | Cost     | Total     |
|----------|--|-----|----------|-----------|
| VR-16    | PUMP STATION #4<br>SUPERIOR CL2 AUTO SWITCHOVER<br>VACUUM REGULATOR 100PPD | 1   | 1,540.00 | 1,540.00T |
| CV-1     | SUPERIOR CHECK VALVE 100PPD  | 1   | 302.00   | 302.00T   |
| VC961    | 1" SOLENOID VALVE  | 1   | 175.00   | 175.00T   |
| GR-150-2 | 150# ELEC. 2 CYL SCALE, SOLO G2-2 IND<br>(4-20MA), 10'                     | 1   | 3,400.00 | 3,400.00T |
| SLD-1-CL | SUPERIOR SINGLE SENSOR CL2<br>DETECTOR 0-10PPM                             | 1   | 2,075.00 | 2,075.00T |
| *LABOR   | LABOR  |     | 500.00   | 500.00T   |
| *MILEAGE | MILEAGE CHARGE   |     | 80.00    | 80.00T    |

|   |                         |            |
|---|-------------------------|------------|
| Phone: 254-857-9711<br>Fax: 254-857-4005  | <b>Subtotal</b>         | \$8,072.00 |
| ESTIMATE EXPIRES 30 DAYS FROM DATE OF ISSUE. **FIBERGLASS BUILDING<br>ESTIMATES ARE ONLY VALID FOR 10 DAYS. | <b>Sales Tax (0.0%)</b> | \$0.00     |
| We look forward to working with you.  | <b>Total</b>            | \$8,072.00 |



PO BOX 519 LORENA, TX 76655

# Quote

|           |            |
|-----------|------------|
| Date      | Estimate # |
| 8/13/2024 | 0403       |

|   |
|---|
| Name / Address  |
| City of Killeen Water & Sewer Dept<br>Attn: Deanna Lathrop<br>805 W Jasper Dr<br>KILLEEN, TX 76542-1325 |

|  |
|--|
| Ship To  |
| City of Killeen<br>c/o WATER & SEWER DEPT<br>1901 Botanical Drive<br>KILLEEN, TX 76542 |

| Item     | Description   | Qty | Cost      | Total      |
|----------|---|-----|-----------|------------|
| 7272     | RODEO SHELTER BUILDING #7272                        | 1   | 21,000.00 | 21,000.00T |
| CL-16    | SUPERIOR CL2 AUTO SWITCHOVER SYSTEM TO 100 PPD      | 1   | 4,640.00  | 4,640.00T  |
| GR-150-2 | 150# ELEC. 2 CYL SCALE, SOLO G2-2 IND (4-20MA), 10' | 1   | 3,400.00  | 3,400.00T  |
| FP5732   | BOOSTER PUMP 1HP 780GPH                             | 1   | 1,450.00  | 1,450.00T  |
| SLD-1-CL | SUPERIOR SINGLE SENSOR CL2 DETECTOR 0-10PPM         | 1   | 2,075.00  | 2,075.00T  |
| *MISC    | SUPPLIES / PLUMBING                                 | 1   | 1,500.00  | 1,500.00T  |
| *MILEAGE | MILEAGE CHARGE                                      |     | 500.00    | 500.00T    |
| *LABOR   | LABOR   |     | 1,200.00  | 1,200.00T  |
| *MISC    | 8X8 CONCRETE SLAB FOR 6X6 BUILDING                  | 1   | 5,000.00  | 5,000.00T  |

|  |                         |             |
|--|-------------------------|-------------|
| Phone: 254-857-9711<br>Fax: 254-857-4005   | <b>Subtotal</b>         | \$40,765.00 |
| ESTIMATE EXPIRES 30 DAYS FROM DATE OF ISSUE. **FIBERGLASS BUILDING ESTIMATES ARE ONLY VALID FOR 10 DAYS. | <b>Sales Tax (0.0%)</b> | \$0.00      |
| We look forward to working with you.   | <b>Total</b>            | \$40,765.00 |



PO BOX 519 LORENA, TX 76655

# Quote

|           |            |
|-----------|------------|
| Date      | Estimate # |
| 8/13/2024 | 0404       |

|   |
|---|
| Name / Address  |
| City of Killeen Water & Sewer Dept<br>Attn: Deanna Lathrop<br>805 W Jasper Dr<br>KILLEEN, TX 76542-1325 |

|  |
|--|
| Ship To  |
| City of Killeen<br>c/o WATER & SEWER DEPT<br>1901 Botanical Drive<br>KILLEEN, TX 76542 |

| Item     | Description   | Qty | Cost     | Total     |
|----------|---|-----|----------|-----------|
| CL-16    | BUNDRANT<br>SUPERIOR CL2 AUTO SWITCHOVER<br>SYSTEM TO 100 PPD | 1   | 4,640.00 | 4,640.00T |
| GR-150-2 | 150# ELEC. 2 CYL SCALE, SOLO G2-2 IND<br>(4-20MA), 10'        | 1   | 3,400.00 | 3,400.00T |
| FP5732   | BOOSTER PUMP 1HP 780GPH                                       | 1   | 1,450.00 | 1,450.00T |
| SLD-1-CL | SUPERIOR SINGLE SENSOR CL2<br>DETECTOR 0-10PPM                | 1   | 2,075.00 | 2,075.00T |
| *MISC    | SUPPLIES / PLUMBING   |     | 1,500.00 | 1,500.00T |
| *LABOR   | LABOR   |     | 800.00   | 800.00T   |
| *MILEAGE | MILEAGE CHARGE  |     | 160.00   | 160.00T   |

|   |                         |             |
|---|-------------------------|-------------|
| Phone: 254-857-9711<br>Fax: 254-857-4005  | <b>Subtotal</b>         | \$14,025.00 |
| ESTIMATE EXPIRES 30 DAYS FROM DATE OF ISSUE. **FIBERGLASS BUILDING<br>ESTIMATES ARE ONLY VALID FOR 10 DAYS. | <b>Sales Tax (0.0%)</b> | \$0.00      |
| We look forward to working with you.  | <b>Total</b>            | \$14,025.00 |

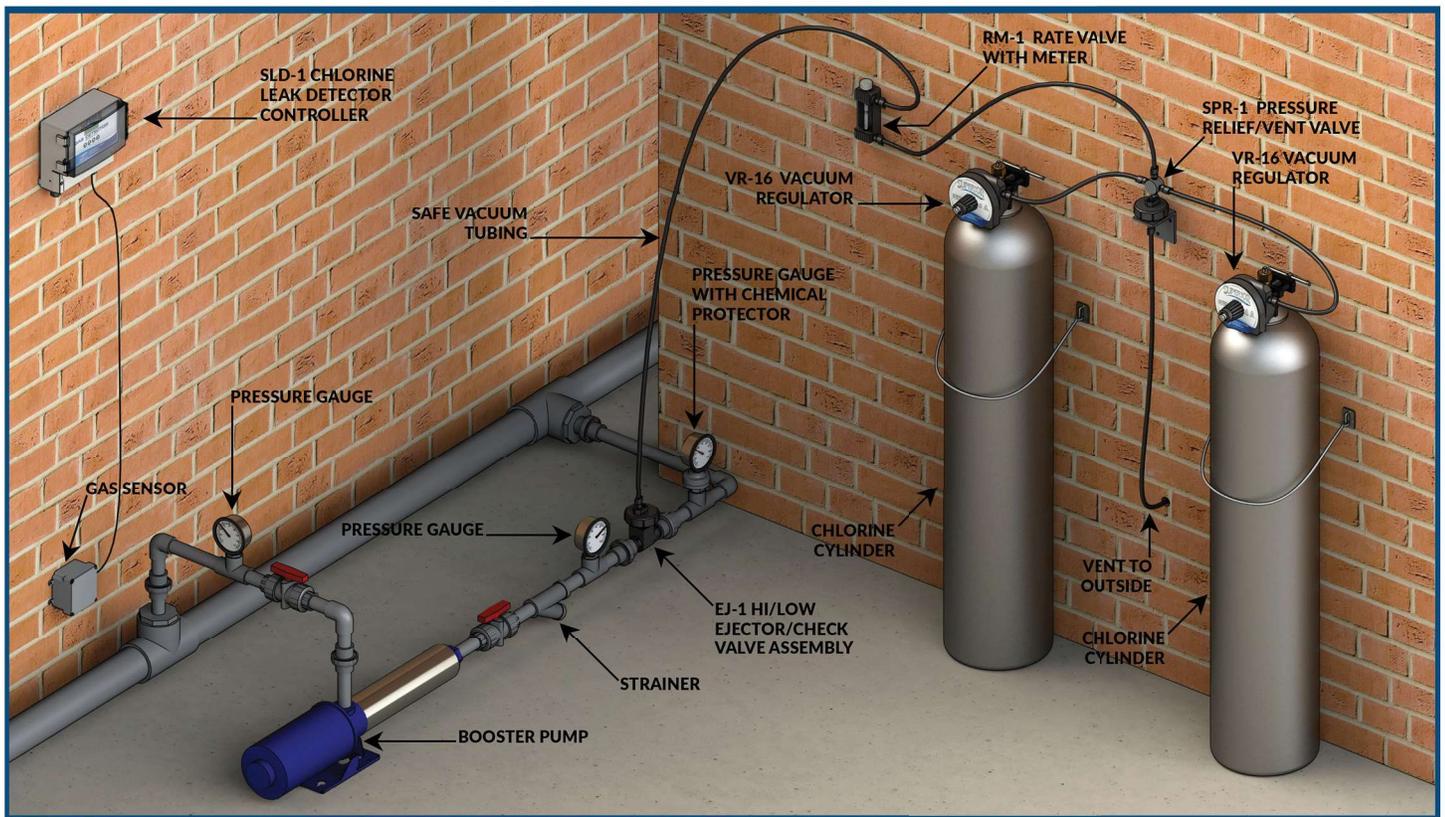


CL - 16 PRODUCT DATA

### GENERAL DESCRIPTION

The **SUPERIOR® Series CL-16 Automatic Switchover Gas Chlorinator** is a state-of-the-art, totally vacuum-operated system designed to automatically switch chlorine feed from an empty cylinder to a full cylinder. The Series CL-16 allows round-the-clock chlorination without being concerned about running out of chlorine when the system is unattended. Series CL-16 chlorinators are of the vacuum-operated solution feed type designed to mount directly on chlorine cylinder valves. Two vacuum regulators, each containing an integral and independent latching mechanism, are mounted directly onto two chlorine cylinder valves. A chlorine gas flow meter panel indicates the amount of chlorine being fed and may be located wherever it is safest and most convenient. Chlorine flow rate is manually adjusted and the design permits easy addition of a number of automatic flow rate control devices. A high efficiency, water operated ejector produces the vacuum necessary to operate the system. The ejector assembly contains a back-flow check valve system to prevent pressurized water from entering the chlorinator. A spring-opposed diaphragm vacuum regulator controls the chlorine gas flow rate and also acts as the safety shut-off valve.

## CL-16 TYPICAL INSTALLATION

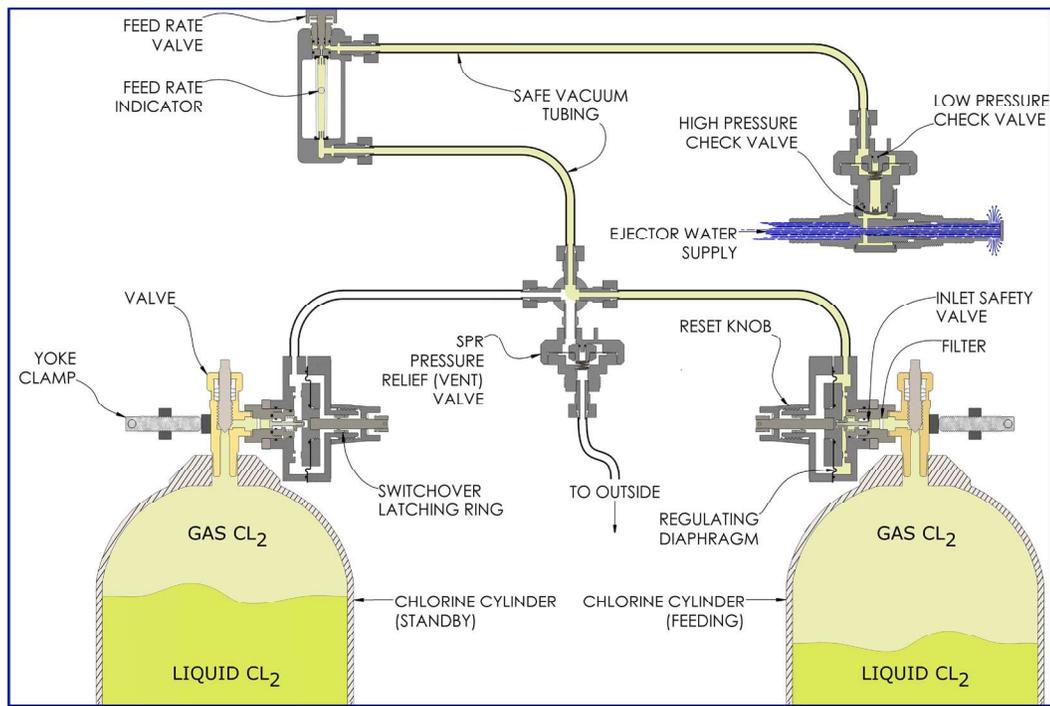


## FEATURES

The SUPERIOR® Series CL-16 represents the most modern design technology coupled with the very best materials available to create an outstanding, user friendly piece of equipment. It is designed with user safety as a primary concern.

1. A new ultra-thick, fluoroplastic yoke coating gives superior corrosion resistance, won't crack, peel or chip.
2. All molded parts are fiber-glass reinforced ABS plastic, designed for superior strength, warp-resistance and chlorine resistance.
3. The rate valve "Seat" is pure fluoroplastic and will not swell, stick or become brittle with age or exposure to liquid chlorine.
4. All external bolts and nuts are Titanium for complete corrosion resistance..a SUPERIOR® exclusive.
5. Extra heavy-duty outlet threads on the ejector diffuser prevents breakage from over-tightening or "bumping" of the ejector assembly.
6. Easier to service and perform routine maintenance, with standard size wrench lugs provided on all screwed-together ejector parts.
7. All vacuum fitting holes are heavily reinforced to prevent the possibility of cracking from over-tightening fittings.
8. "Dual-pressure" check valve is standard on all SUPERIOR® gas Chlorinators. Proven high back-pressure unitized check valve design protects against sudden surges up to 300 PSIG while a spring-loaded diaphragm check provides positive shutoff even when there is no back-pressure to force the seat closed.
9. Built-in switchover "detent" mechanism in each regulator requires no field adjustment, and allows operator to easily designate the standby and operating cylinders.
10. All SUPERIOR® gas chlorinators carry a 3-year limited warranty, in addition to a lifetime warranty on 4 vital parts: main diaphragm, springs, inlet adaptor and body bolts.
11. Fewer parts, combined with superior materials and a superior design gives you a superior gas chlorinator.

## CL-16 FLOW DIAGRAM



## SYSTEM OPERATION

The automatic switchover vacuum regulators are securely clamped onto the chlorine cylinder valves. Vacuum tubing connects each regulator to the wall mounted pressure relief/vent valve which also serves as an interconnecting point for the vacuum tubing. A single piece of vacuum tubing connects the pressure relief valve to the wall mounted remote meter tube/rate valve panel. The ejector is connected to the remote meter panel with a single piece of vacuum tubing.

Water under pressure flows through the ejector at high velocity causing a strong vacuum to be created. This opens the check valves in the ejector assembly and transmits a vacuum signal through the remote meter tube/rate valve panel, back to the vacuum regulators. When the vacuum reaches a pre-set level, the diaphragm in the regulator moves, opening the chlorine inlet safety valve, and permits gas to flow from the chlorine cylinder. The spring-opposed diaphragm and inlet valve regulate the vacuum at this point.

Chlorine gas passes through the regulator, pressure relief valve connector, remote flow meter panel and rate control valve to the ejector. The gas mixes with the ejector water and is discharged through the diffuser into the water being treated.

When the chlorine supply is depleted in one source, vacuum starts to increase in the system. This causes the diaphragm in the "stand-by" regulator to be pulled back, overcoming the detent mechanism and opening the inlet/safety valve. Chlorine gas is then withdrawn from the "stand-by" cylinder to satisfy the increased system vacuum and the vacuum returns to the operating level. The empty cylinder is replaced at the operator's convenience, and the regulator then placed on "stand-by".

## MATERIALS OF CONSTRUCTION

One of SUPERIOR's major competitive advantages is the use of the finest, strongest and most durable materials available. Extensive use of Fluoroplastics and fiberglass reinforced thermo-plastics allow SUPERIOR® Gas Chlorinators to withstand attack by chlorine in any form and to give the longest operational life. Many parts are guaranteed for the life of the equipment against chlorine damage.

## FLOW METER CAPACITIES

SUPERIOR's modular design concept allows the chlorine gas indicating meter and flow rate control valve to be located wherever it is most convenient for the operator, and also in the safest location. Variable area flow metering tubes are available with dual English/Metric scale maximum capacities of 0.8, 1.5, 4, 10, 25, 50 and 100 pounds per 24 hours of chlorine gas, as well as 15, 30, 75, 200, 500, 1000 and 2000 grams per hour, respectively. All metering tubes are interchangeable and may be changed in the field without special tools.

# SPECIFICATIONS

The chlorinator shall be SUPERIOR® MODEL CL-16 manufactured by Chemical Injection Technologies, Inc., Ft. Pierce, Florida, and shall have a maximum capacity of \_\_\_\_\_ pounds per day (gr/hr) of chlorine feed and shall be equipped with a chlorine flow meter of \_\_\_\_\_ pounds per day (gr/hr).

The chlorinator shall be of modular design consisting of two (2) automatic switchover vacuum regulators, one (1) pressure relief/vent valve, one (1) flow meter/rate valve panel, and one (1) ejector/check valve. Each of these assemblies shall be capable of being individually located wherever safety and/or operator convenience dictates.

The vacuum regulators shall mount directly on the chlorine cylinder valves by means of a positive yoke type clamp having an integral tightening screw with slide bar handle. No wrenches or other tools shall be required to mount or dismount the vacuum regulator from the chlorine valve. The chlorine valve/chlorinator inlet adaptor shall be constructed of corrosion-proof fluoroplastic material which shall be inert to the effects of wet, dry or liquid chlorine. The inlet safety shut-off/vacuum regulating valve shall be of capsulated design, easily removable as a unit from the outlet side of the yoke. A fluoroplastic filter shall be installed in the vacuum regulator inlet and shall be capable of removing impurities greater than 25 microns. All external screws and nuts shall be made of Titanium to prevent corrosion.

Each automatic switchover vacuum regulator shall contain its own built-in diaphragm detent mechanism, which shall be made entirely of non-metallic corrosion resistant materials. The detent mechanism shall be factory pre-set and shall not require any field adjustment. The reset knob shall be designed to automatically "ratchet" into free turning mode after the regulator has been reset, allowing no further forward pressure to be applied to the detent mechanism shaft without regard to further turning of the knob.

The flow meter/rate control valve panel shall be capable of mounting wherever it is safest and most convenient for operating personnel. The panel shall be constructed of fiberglass reinforced thermoplastic material and shall incorporate a flow rate control valve made of fluoroplastic material which is inert to the corrosive effects of chlorine. The rate valve metering tip shall be constructed of metal which is completely impervious to the effects of wet, dry or liquid chlorine attack. Design shall provide for full closing of the rate valve without engaging the control surfaces, to prevent damage. Minimum calibrated feed rate shall be 1/20th of maximum flow meter scale (20:1 turndown ratio). Accuracy shall be ±2% of maximum. Minimum calibrated feed rate shall be 1/20th of maximum flow meter scale (20:1 turndown ratio). Accuracy shall be ±2% of maximum.

Vacuum shall be created by a fixed-throat venturi/ejector system connected directly to the chlorine solution diffuser. A dual high-pressure/low-pressure check valve system shall prevent water from entering the gas system. The ejector assembly shall be capable of withstanding water pressure up to 300 PSIG (20.7 Bars). A universal-type chlorine solution diffuser shall be provided which shall allow close-coupling of the ejector to a water main, use of flexible solution hose or rigid solution pipe without the use of special adaptors.

## SPECIFICATIONS STANDARD ACCESSORIES

- 50 ft. - 3/8" Vent & vacuum tubing
- 20 - Lead cylinder connection gaskets
- 1 - Cylinder Wrench
- 2 - Vent insect screen

## OPTIONAL ACCESSORIES AVAILABLE

|                        |                      |
|------------------------|----------------------|
| Inlet Water Assembly   | Gas Masks            |
| Wall Manifold Kits     | Gas Detectors        |
| Booster Pumps          | Scales               |
| Residual Analyzers     | Gauges               |
| Automatic Controls     | Chlorine Comparators |
| Ton Container Adaptors | Ball Check Valve     |
| Dual High Pressure     | Others Available     |
| Check Valve Assembly   |                      |

## OTHER SUPERIOR™ SOLUTIONS AVAILABLE

- VACUFEED LIQUID CHEMICAL FEED SYSTEMS
- VACUUM ALARM SAFETY DEVICE
- INSTRUMENTATION, ANALYZERS, & CONTROLS
- CHLOR-CLEAR EDUCTOR TUBE CLEARING SYSTEM
- UP TO 10,000 POUNDS PER DAY (00 KG/HR)
- GAS SULFONATORS (DECHLORINATOR)
- AMMONIATORS
- AUTOMATIC FLOW PROPORTIONING
- AUTOMATIC RESIDUAL CONTROL



SUPERIOR™ Gas Chlorinators are proudly made by Chemical Injection Technologies, Inc.  
835 Edwards Road, Fort Pierce, Florida 34982 USA. T: 772-461-0666.

The **ULTIMATE** in personnel and property protection!



A keypad with green LED backlight allows for easy reading in any light. Two different gas sensor channels can be the same gas (two locations) or any two of chlorine, sulfur dioxide, ammonia.

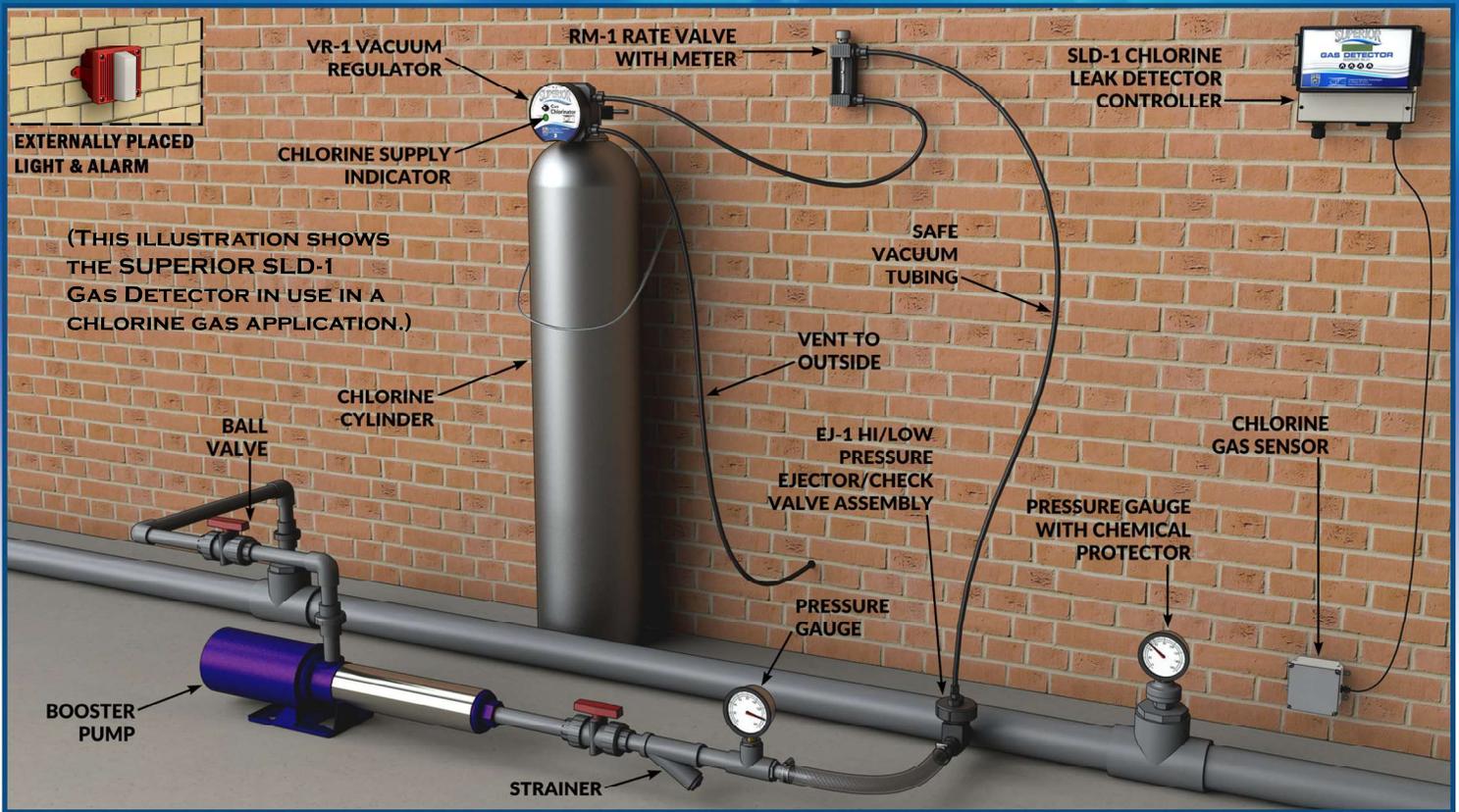
The **SUPERIOR™** Gas Detector is designed for use in many applications.

- Wastewater treatment plants
- Water purification plants
- Swimming pools
- Cooling towers - Air scrubbers
- Food and beverage processing
- Chemical processing



**SCAN this QR code for more information!**

## GAS DETECTOR - Model SLD-1 & SLD-2



The unit can be placed where it is most convenient for the operator, up to 1,000 feet (305 meters) away from sensors in a monitored environment. Now available with optional, extended life, 3000mAh battery backup.

### STANDARD FEATURES INCLUDE:

- ◆ User-friendly key pad interface with functions indicated by individual menu display screens.
- ◆ 16-character by 2-line display, with a green LED back light for easy reading, even in low light areas.
- ◆ NEMA-4X controller enclosure.
- ◆ 95dB internally mounted alarm.
- ◆ Event alarm log records up to 356 events, with time and date, which can be viewed on the display or downloaded from the optional serial port.
- ◆ 4-20mA gas level monitor output.
- ◆ Sensor life and calibration reminder timers.
- ◆ Password protection for all parameter settings.
- ◆ High, Low, Latching and Non-Latching alarm relays.
- ◆ Two level alarm settings for "Warning" and "Danger" gas levels. OSHA Compliant.
- ◆ All alarm relays are user adjustable for N/O, N/C, Latch or Non-Latch.
- ◆ Flashing backlight screen when alarm acknowledgment is required.