



Hometown People. Hometown Power.

Mid-Michigan Water Chemical Consortium 2023-2024

202212213901

Issue Date: 1/9/2023

Questions Deadline: 1/16/2023 11:59 PM (ET)

Response Deadline: 1/30/2023 02:00 PM (ET)

Contact Information

Contact: Monica Clark

Address: 1110 South Pennsylvania Ave.

Lansing, MI 48912

Email: monica.clark@lbwl.com

Event Information

Number: Mid-Michigan Water Chemical Consortium 2023-2024
Title: 202212213901
Type: Request for Proposal- Sealed
Issue Date: 1/9/2023
Question Deadline: 1/16/2023 11:59 PM (ET)
Response Deadline: 1/30/2023 02:00 PM (ET)
Notes: Notice to Bidders:

Sealed Proposals in response to this Request for Proposal ("RFP") will be received by the Board of Water and Light ("BWL") for Mid-Michigan Water Chemical Consortium 2023-2024.

Proposals must be in full accordance with the enclosed Scope of Work.

Proposals must be submitted through IonWave. Proposals received via e-mail will not be accepted.

The BWL reserves the right to reject any or all Proposals, waive irregularities or technicalities in any Proposal, and accept any Proposal in whole or in part, which in the opinion of the BWL, is in its best interest. The BWL does not limit the methods or factors to be used for evaluation.

Bid Attachments

Instructions to Bidders_Chemical Consortium.pdf

Instructions to Bidders

[Download](#)

Sworn_and_Notarized_Affidavit_of_Compliance_-_Iran_Economic_Sanctions_Act_Revised_May_2018.pdf

Iran Economic Sanctions Act Form

[View Online](#)

Terms and Conditions for Water Chemicals_2022.pdf

Terms and Conditions for Water Chemicals

[Download](#)

Water_Chemical_Consortium_SOW.pdf

Scope of Work

[Download](#)

Water_Chemical_Consortium-Attachment_A.xlsx

Water Chemical Consortium-Attachment A

[Download](#)

Supplier Bid Response Tutorial.pdf

Bid Responses Tutorial

[Download](#)

Requested Attachments

Exceptions to Terms and Conditions (if applicable)

Sworn and Notarized Affidavit of Compliance

(Attachment required)

Other Attachment

Bid Attributes

1 Company Contact

Please provide the primary contact's name, e-mail, and phone number for this proposal.

John Dunlap, Sales Representative

Email: John.Dunlap@alexchem.com

Phone: (219) 393-5558, ext. 403

(Required: Maximum 1000 characters allowed)

2 How many years has your firm been in business under the present ownership?

41 Years

(Required: Maximum 1000 characters allowed)

3 Have you done business with the Board of Water and Light? If so, furnish specifics.

Yes, supplied and deliver Sodium Hypochlorite and Hydrofluosilicic Acid.

(Required: Maximum 1000 characters allowed)

4 Have you done business with the City of Lansing? If so, furnish specifics.

Yes, supplied and deliver Sodium Hypochlorite

(Required: Maximum 1000 characters allowed)

5 Have you ever defaulted on a contract or been involved in litigation with the BWL or the City of Lansing? If so, furnish specifics.

No

(Required: Maximum 1000 characters allowed)

6 Have you ever defaulted on a contract or been involved in litigation with any other client in the past five years? If so, furnish specifics.

No

(Required: Maximum 1000 characters allowed)

7 List any relationships between your firm's staff and any current BWL employee.

None

(Required: Maximum 1000 characters allowed)

8 List at least three (3) references for similar work you have performed for other clients. Include client's name, contact name, title and phone number.

*** SEE ATTACHED ***

(Required: Maximum 4000 characters allowed)

9 List subcontractors that you plan to use on this project.

None

(Required: Maximum 1000 characters allowed)

10 Indicate any exceptions to the enclosed Terms and Conditions

If YES, Contractor must provide red-lined editing on the BWL Terms and Conditions Microsoft Word document only. Any submission of, or general references to Contractor Terms and Conditions in its entirety anywhere within the proposal will invalidate the proposal.

No Yes

(Required: Check only one)

11 Acknowledgment of receipt of any Addendas issued.

Yes No

(Required: Check only one)

12 Confirm you have reviewed all attachments included in this solicitation.

Yes

(Required: Check if applicable)

13 Product meets quality specifications in the Scope of Work?

Yes No

(Required: Check only one)

14 Able to meet delivery requirements for each municipality in the Scope of Work?

Including but not limited to delivery days of week, hours, load size, unloading requirements.

Yes No

(Optional: Check only one)

1
5 I have read and agreed.

The Bidder states that this proposal is made in conformity with the Proposal Documents and agrees that, in the event of any discrepancies or differences between any conditions of their proposal and the Proposal Documents provided in the Instructions to Bidders and completed by the bidder, the provisions of the latter shall prevail. No verbal or written agreements or understandings considered or entered into prior to signing of a contract in the form of a purchase order, shall be binding after the signing of the contract unless incorporated in the contract.

The Bidder certifies that this proposal is made in good faith, upon the best information, with knowledge and accuracy, and without collusion or connection with any other person or persons submitting proposals for the work.

I have read and agreed
(Required: Check if applicable)

Bid Lines

1	Sodium Hypochlorite (per gallon) <i>(Response required)</i> Quantity: <u> 1 </u> UOM: <u> GAL </u> Price: <input type="text" value="\$2.29"/> Total: <input type="text" value="\$2.29"/> Supplier Notes: <u> PRICING IS FIRM CALENDAR QUARTERLY ONLY!</u> <u> PRICING BASED ON FULL TANKER TRUCK DELIVERIES </u> <input type="checkbox"/> No bid <input type="checkbox"/> Additional notes <i>(Attach separate sheet)</i>
2	Sodium Hypochlorite Demurrage (first 4 hours free) <i>(Response required)</i> Quantity: <u> 1 </u> UOM: <u> HR </u> Price: <input type="text" value="\$75.00"/> Total: <input type="text" value="\$75.00"/> Supplier Notes: <u> DEMURRAGE FEE STARTS AFTER 2 HOURS </u> <input type="checkbox"/> No bid <input type="checkbox"/> Additional notes <i>(Attach separate sheet)</i>
3	Hydrofluosilic Acid- 40,000 lbs. minimum shipments <i>(Response required)</i> Quantity: <u> 1 </u> UOM: <u> ton </u> Price: <input type="text" value="\$582.00"/> Total: <input type="text" value="\$582.00"/> Supplier Notes: <u> 40,000 LBS MINIMUM. ** SEE MULTIPLE LOCATION LINE #5 </u> <u> PRICING (\$100.00 MULTI STOP FEE) ** </u> <input type="checkbox"/> No bid <input type="checkbox"/> Additional notes <i>(Attach separate sheet)</i>
4	Hydrofluosilic Acid- 30,000 lbs. minimum shipments <i>(Response required)</i> Quantity: <u> 1 </u> UOM: <u> ton </u> Price: <input type="text" value="\$610.00"/> Total: <input type="text" value="\$610.00"/> Supplier Notes: <u> MINIMUM 30,000 LBS - 39,999 LBS </u> <input type="checkbox"/> No bid <input type="checkbox"/> Additional notes <i>(Attach separate sheet)</i>

5 Hydrofluosilic Acid- multiple locations in 40,000 lbs. minimum shipments
(Response required)
 Quantity: 1 UOM: ton Price: Total:
 Supplier Notes: 40,000 LBS MINIMUM - \$100.00 MULTI STOP FEE
 No bid
 Additional notes
(Attach separate sheet)

6 Hydrofluosilic Acid- Demurrage (first 4 hours free)
(Response required)
 Quantity: 1 UOM: hr Price: Total:
 Supplier Notes: DEMURRAGE FEE STARTS AFTER 2 HOURS
 No bid
 Additional notes
(Attach separate sheet)

7 Ferric Chloride- Dry
(Response required)
 Quantity: 1 UOM: ton Price: Total:
 Supplier Notes: PRICING IS BASED OFF OF FULL TRUCK LOADS
 No bid
 Additional notes
(Attach separate sheet)

8 Ferric Chloride-Liquid
(Response required)
 Quantity: 1 UOM: ton Price: Total:
 Supplier Notes: PRICING IS BASED OFF OF PARTIAL TRUCK LOADS
 MINIMUM ORDER OF 3,000 GALLONS
 No bid
 Additional notes
(Attach separate sheet)

9 Ferric Chloride-Demurrage (first 4 hours free)
(Response required)
 Quantity: 1 UOM: hr Price: Total:
 Supplier Notes: DEMURRAGE FEE STARTS AFTER 2 HOURS
 No bid
 Additional notes
(Attach separate sheet)

10 Pebble Quicklime
(Response required)
 Quantity: 1 UOM: ton Price: Total:
 Supplier Notes: _____
 No bid
 Additional notes
(Attach separate sheet)

1 Pebble Quicklime- Demurrage (first 4 hours free)

1 (Response required)

Quantity: 1 UOM: hr Price: \$ Total: \$

Supplier Notes: _____

No bid
 Additional notes
(Attach separate sheet)

1 Soda Ash

2 (Response required)

Quantity: 1 UOM: ton Price: \$ Total: \$

Supplier Notes: _____

No bid
 Additional notes
(Attach separate sheet)

1 Soda Ash- Demurrage (first 4 hours free)

3 (Response required)

Quantity: 1 UOM: hr Price: \$ Total: \$

Supplier Notes: _____

No bid
 Additional notes
(Attach separate sheet)

*** N/A ***

Supplier Information

Company Name:

Contact Name:

Address:

Phone:

Fax:

Email:

Supplier Notes

By submitting your response, you certify that you are authorized to represent and bind your company.

Print Name

Signature

SCOPE OF WORK

Mid-Michigan Water Chemical Consortium 2023-2024

1. GENERAL

The Lansing Board of Water & Light (BWL) is soliciting proposals for a joint chemical contract. This contract is for one year, July 01, 2023 – June 30, 2024. The entities participating in this contract are listed in the Terms and Conditions. All chemicals must conform to National Science Foundation (NSF) and American National Standards Institute (ANSI) standards for use in potable drinking water and meet all specifications listed in bid documents. Unit prices of chemical are for delivery to any and all of the facilities listed in the proposal.

2. EVALUATION CRITERIA

Eligible proposals will be evaluated for each chemical according to the matrix below. Bidder should include all relevant information for use in scoring their proposal. Bidders notified of award will need to be in contact with each entity for individual Purchase Orders. Successful bidders who subsequently cannot meet the terms of each entity's Purchase Order may have their contract cancelled and the next bidder awarded the contract. It is the responsibility of each bidder to ensure they understand the requirements of each Purchase Order before submitting their proposal.

Criteria	Description	Weight
Price Competitiveness	Price as compared to other bidders.	25%
Product Quality	The product consistently meets the required specifications. Evaluated based on previous experience with vendor, contact with references, provided substantiating data, etc.	25%
Delivery Requirements	Deliveries are reliably made during specified times and dates. Vendor openly and honestly communicates when delivery schedule must be changed. Evaluated based on previous experience with vendor, contact with references, etc.	25%
Administrative Requirements	Vendor meets all conditions laid out in the specification including the Terms and Conditions, Insurance requirements, etc.	25%

3. CHEMICAL SPECIFICATIONS

NSF certification and Safety Data Sheet (SDS) shall accompany all orders and shipments and be included in the proposal. The Contractor/ Driver are responsible for appropriate hoses, adapters, and attachments to properly connect to unloading lines. Deliveries shall be made by self-unloading bulk trucks. If any deficiency is found and cannot be resolved with the supplier, the contract can be cancelled in accordance with the General Terms. A submitted proposal indicates compliance with this Scope of Work.

Sodium Hypochlorite

- Shall meet NSF/ANSI Standard 60 and American Water Works Association (AWWA) B300-18.
- Sodium Hypochlorite to be between 12% and 17% by weight.
- Delivery will be within ten days of manufactured date.

Hydrofluosilic Acid

- Pricing is on an "as is" basis. Price shall stay the same regardless of the assay received.
- Fluoride shall be furnished as Fluorosilicic Acid containing twenty (20) to thirty (30) percent H_2SiF_6 by weight
- Must meet NSF/ANSI Standard 60 and AWWA B703-19.
- A certified analysis is to be furnished with each shipment detailing the percent acid and the specific gravity of the solution
- Truck must be capable of maintaining 20 PSIG air pressure during unloading

Ferric Chloride

- Dry
 - Actual delivered solution to be 38% ferric chloride
 - Propose per dry ton price
 - Liquid Ton
- Ferric Chloride shall be furnished as liquid ferric chloride and must conform to current AWWA Standard B407. The solution will have a specific gravity of 1.3 to 1.5 and the ferric chloride content will be between 38.5% and 45% by weight.
 - Bids for ferric chloride are to be submitted on the basis of 100% FeCl_3 .
 - Delivery shall be made by self-unloading bulk trucks of approximately 3,000 gallons per delivery.
 - Ferric chloride shall be free of objectionable amounts of solids or foreign material. In the event an objectionable amount is detected in the product, or accumulates in the storage tank, it shall be the suppliers responsibility to have the storage tank cleaned out at its expense, or to reimburse for costs incurred if the supplier fails to clean the tank in a timely manner.

Pebble Quick Lime

- Pebble quicklime shall meet all chemical specifications set forth in AWWA B202-18 unless otherwise specified in this Scope of Work.
- Pebble quicklime shall be sized $3/8 \times 3/4$, and shall conform to Section 4.1.2 of AWWA B202-18, as recommended for pneumatic dry-feed equipment. The material shall not contain excessive amounts of fines or dust that would inhibit efficient transport.
- Pebble quick lime shall be free of debris including rubber, string, hardware (e.g. nuts, bolts, nails, wire, washers, etc.), and wood. Supplier shall be responsible for ALL COSTS associated with the repair and replacement of equipment damaged by debris or excess inert material. Supplier shall also provide a 20% discount on subsequent delivery should the specifications outlined herein fail to be met.
- Pebble Quicklime shall be high-reactive when the slaking rate is tested in accordance with Section 5.4 of AWWA B202-18.

- Pebble quicklime shall not contain excessive amounts of Objectionable Insoluble Matter (grit) as determined by the rejection volume at the lime slaker, or by the method in Section 5.5 of AWWA B202-18.
- The lime shall not contain any organic or inorganic substances in quantities capable of producing deleterious effect upon the health of people drinking the water that has been treated with it.
- The purchase price of Calcium Oxide shall be based on 90% or greater available calcium oxide content when tested in accordance with Section 5.3 of AWWA B202-18. There shall be a reduction of 1.5% of the bid price for each 1.0%, or fraction thereof, deficiency of available calcium oxide content between 90% and 80%, and a 2.0% reduction for each 10%, or fraction thereof, deficiency of available calcium oxide content below 80% based on analysis done by the municipality's laboratory analysis using method AWWA 202-18.
- The vendor shall supply a sample of each load to the Operations Supervisor prior to unloading. One-half of each sample will be retained for 30 days for inspection or analysis by the supplier. The municipality will notify the supplier within ten days of receipt of a shipment, when possible, that does not meet specifications.

Sodium Carbonate

- Product shall have a bulk density of 0.5 - 0.9 g/mL. Product shall be a free flowing finely powdered grade. Contractor shall provide a current product analysis with bid indicating percent NaCO and NaO, sieve analysis, density, specific gravity and shall provide proof that product meets AWWA and NSF standards for drinking water.
- Product must contain Sodium Carbonate of not less than 99%, of which not less than 58% shall be in the form of Sodium Oxide. Product shall not contain insoluble matter exceeding 0.05%. Products shall not contain large lumps, crystals, chips, or other foreign matter. Product deemed unacceptable by Owner due to poor quality such as clumping or a failure to homogenously dissolve in solution that will clog metering pumps and appurtenances will be rejected.
- AWWA specification B201-13 (or current version). NSF 60. Affidavit from manufacturer/supplier stating that the material provided complies with the applicable requirements of this RFP is required with bid.

END SCOPE OF WORK

SWORN AND NOTARIZED AFFIDAVIT OF COMPLIANCE

IRAN ECONOMIC SANCTIONS ACT

Michigan Public Act No. 517 of 2012

All bidders must submit the following certification statement in compliance with Public Act No. 517 of 2012 (the "Iran Economic Sanctions Act") and attach this form to the bid. **The Lansing Board of Water & Light shall not accept any bid that does not include this sworn and notarized certification of statement.**

The undersigned, the owner or authorized officer of Alexander Chemical Corporation (the Bidder), pursuant to the compliance certification requirement provided in the Lansing Board of Water & Light Request for Proposal, hereby certifies, represents and warrants that the Bidder (including its officers, directors and employees) is not an "Iran linked business" within the meaning of the Iran Economic Sanctions Act, and that in the event the Bidder is awarded a contract as a result of the aforementioned Request for Proposal, the Bidder will not become an "Iran linked business" at any time during the course of performing the work or any services under the contract.

Specifically, the undersigned, owner or authorized officer of Alexander Chemical Corporation (the Bidder) attests it does not fall within the following definition of a "Iran linked business" under the Iran Economic Sanctions Act:

MCL 129.312 (e) of the Act provides:

(e) "Iran linked business" means either of the following:

- (i) A person [as defined below by MCL 129.312(f)] engaging in investment activities in the energy sector of Iran, including a person that provides oil or liquefied natural gas tankers or products used to construct or maintain pipelines used to transport oil or liquefied natural gas for the energy sector of Iran.*
- (ii) A financial institution that extends credit to another person, if that person will use the credit to engage in investment activities in the energy sector of Iran.*

MCL 129.312(f) of the Act defines "Person" as follows:

(f) "Person" means any of the following:

- (i) An individual, corporation, company, limited liability company, business association, partnership, society, trust, or any other nongovernmental entity, organization, or group.*
- (ii) Any governmental entity or instrumentality of a government, including a multilateral development institution, as defined in section 1701(c)(3) of the international financial institutional act, 22 USC 262r(c)(3).*

The Bidder further acknowledges that any person who is found to have submitted a false certification is responsible for a civil penalty of not more than \$250,000.00 or two (2) times the amount of the contract or proposed contract for which the false certification is made, whichever is greater, the cost of the Lansing Board of Water & Light's investigation, and reasonable attorney fees, in addition to the fine. Moreover, any person who submitted a false certification shall be ineligible to bid on a Request for Proposal for three (3) years from the date it is determined that the person has submitted the false certification.

BIDDER

Alexander Chemical Corporation

By: [Signature] / Robert Davidson

Its: CEO

Date: January 27, 2023

STATE OF INDIANA)

COUNTY OF LAPORTE)

This instrument was acknowledged before me on the 27th day of January, 2023, by Robert Davidson, CEO.

[Signature: Kathryn Schoonover]



____ My
Commission Expires _____ Acting
in the County of: _____

TERMS AND CONDITIONS FOR WATER CHEMICALS

General Requirements may be individually modified or superseded by PURCHASER Supplemental Requirements. In case of conflicts, the PURCHASER Supplemental Requirements shall govern.

1. DEFINITIONS

All terms and conditions of the Seller most recent Permit application shall remain in effect except as may be modified herein.

2. TERM

The following meanings are ascribed to the terms used in these General Requirements:

PURCHASER – means the City of Lansing, by its Board of Water and Light.

Consortium – means Mid-Michigan Drinking Water Consortium, consisting of the City of Lansing, by its Board of Water and Light, City of Lansing, City of East Lansing, City of Jackson Water and Wastewater, City of Adrian, City of Ann Arbor Drinking Water and Wastewater Treatment Plant, East Lansing-Meridian Water and Sewer Authority, Owosso Wastewater Plant and Drinking Water Plant.

Contract Documents – means the PURCHASER's solicitation, including the invitation to bid or request for proposal or quotation, instructions to bidders/offerors, SELLER'S response to the solicitation, PURCHASER drawings, the specifications, any addenda or supplements including Change Orders, the purchase order, these General Requirements, and Supplemental Requirements.

SELLER– means the individual, partnership, corporation or other entity awarded a purchase order by the PURCHASER.

Day – means a calendar day.

Designated Representative – means the General Manager of the PURCHASER, or authorized designee. Designated Representative shall be the individual designated to receive submissions and notices from SELLER and to represent the PURCHASER in the performance of the Contract. Any interaction with another division of the PURCHASER shall be coordinated through the Designated Representative.

Participants – means entities part of Mid-Michigan Drinking Water Consortium.

Work – means the products and services to be furnished under the Contract Documents. Work includes and is the result of performing services, transporting chemicals, and furnishing chemicals.

3. TERMS

A. QUALITY

- (1) Chemicals shall meet all criteria identified in the Specifications.
- (2) The PURCHASER reserves the right to reject all chemicals that fail to meet those criteria.
- (3) Chemicals that fail to meet those criteria that have been delivered to the PURCHASER must be removed by the SELLER at SELLER's expense.

B. CHEMICALS FURNISHED BY SELLER

- (1) The SELLER shall arrange and pay all charges for the proper delivery, receipt, rigging, unloading, and storage of all chemicals requested by the PURCHASER. The place of delivery is the PURCHASER's place of business. The PURCHASER will provide an area for storage of the material at its delivery site. SELLER must supply a sufficient number of individuals to promptly unload and store chemicals. SELLER continues to bear all responsibility for care, custody, control and protection of the chemicals until the chemicals are properly stored. After storage, SELLER retains responsibility only for the quality of the chemicals.

- (2) The SELLER shall notify the PURCHASER's Representative when any material is ready for shipment. Before arranging for any shipment, SELLER must ensure that the delivery will not cause undue blocking at the delivery site.
- (3) SELLER shall supply the manufacturer's name and catalog number for each item, if applicable.
- (4) PURCHASER's Designated Representative must coordinate shipment to the site.
- (5) If requested by the PURCHASER's Designated Representative, SELLER shall furnish copies of bills of lading, shipping manifests, and other papers showing shipment of chemicals and/or reports of their receipt.
- (6) SELLER shall show the PURCHASER's purchase order number and release number on all shipments, packing lists, and invoices. Shipments may be refused without this information.
- (7) All chemicals shall be new and from a reputable manufacturer currently engaged in the production of like chemicals.

4. PERMITS

SELLER shall obtain all permits necessary to transport and deliver chemicals to the PURCHASER. The PURCHASER shall obtain any necessary permit to store the chemicals on its properties.

5. PRICE

All prices shall be a firm delivered price for the term of the contract, unless specified in SELLER's proposal or bid and accepted by the PURCHASER before award. Prices shall include any fuel surcharge.

The PURCHASER shall solely be financially responsible for such material it procures on its own behalf and through its own bilateral contracts under the proposal of this agreement. The PURCHASER shall not in any shape or form be financially responsible for any procured material obtained from contracts by any other Participant(s) of Consortium.

6. SITE SECURITY, SAFETY AND ASSET MANAGEMENT COMPLIANCE

- (1) While on PURCHASER'S property, SELLER, its agents, employees or subcontractors shall conform in all respects with all of PURCHASER'S physical, fire, or other security policies or regulations. SELLER shall proceed with the Work in a manner dictated by all applicable federal and state safety regulations, the PURCHASER Safety Manual, and safe practice, using chemicals, tools and rigging of a safe character. The PURCHASER's Safety Manual can be found at <https://www.lbwl.com/safetymanual>. SELLER shall strictly comply with these laws, rules and regulations including, but not limited to, OSHA and MIOSHA requirements, including without limitation MIOSHA "Right to Know" obligations, MCL 408.1001 et seq., and shall provide documented evidence of that compliance upon the Designated Representative's request.
- (2) SELLER shall provide and use all protective devices to permit safe working conditions for SELLER's employees and to prevent hazards to employees of other Seller, the PURCHASER and its employees, or the public.
- (3) While on PURCHASER property, SELLER'S personnel shall wear appropriate personal protection equipment.
- (4) If, in the PURCHASER's opinion, SELLER is not proceeding with its Work in a safe manner or in accordance with federal, state, or PURCHASER safety regulations, the PURCHASER may issue a Seller Safety Violation Notice or otherwise stop the Work and direct the SELLER to rectify the unsafe conditions immediately. If SELLER fails to promptly rectify the situation, the PURCHASER may proceed to rectify the unsafe conditions at SELLER'S expense. Compliance with this paragraph shall effect neither the Contract price nor the schedule. SELLER shall comply with all PURCHASERS, OSHA, and MIOSHA confined space requirements and procedures, including PURCHASER permitting requirements.
- (5) Additionally, SELLER acknowledges that BWL property is an industrial environment with certain inherent hazards. As such, SELLER and its respective subcontractors enters upon PURCHASER'S property at its own risk and waives any and all liability associated with injuries sustained on PURCHASER'S property. SELLER further understands that SELLER, in addition to its respective subcontractors will be required to review and execute such a waiver prior to entering upon PURCHASER'S property.
- (6) PURCHASER has an asset management system approach that is consistent with the requirements of ISO 55001 and forms part of a wider Integrated Management System for the PURCHASER. All SELLERS and subcontractors are responsible for understanding and following the principles encompassed in the PURCHASER'S Asset Management policy (<https://www.lbwl.com/ampolicy>).

7. INSURANCE

- (1) At its own expense, SELLER shall acquire and continue in effect for the term of the Contract, insurance providing the following coverage(s):

- (a) Commercial General Liability Insurance, written on a per occurrence basis. This coverage shall include Personal Injury, Contractual Liability, and Products/Completed Operations insurance. The limit of liability shall be at least \$1,000,000 combined single limit for bodily injury and property damage. There shall be no exclusion for work within any distance of railroad property.
- (b) Automobile liability insurance that complies with the requirements of the Michigan No-fault law with residual liability limit of at least \$1,000,000 combined single limit for bodily injury and property damage. There shall be coverage for owned, hired, and non-owned vehicles.
- (c) Worker's compensation insurance as required by Michigan law.
- (d) Umbrella liability insurance over all other required insurance, written on a per occurrence basis with \$5,000,000 limit.
- (e) Contractor pollution liability insurance, written on a per occurrence basis, with \$5,000,000 limit including transportation pollution liability that covers loading and unloading and a waste brokering endorsement if disposal at non-owned site.

For all required insurance, PURCHASER shall be named an additional insured without added exclusions or limiting endorsements that diminish PURCHASER'S protections. Further, all insurers shall be authorized to do business in Michigan, and shall carry and maintain a minimum rating of "A-" from A.M. Best and Co., with a minimum financial size category of "V." All required insurance shall be primary to any insurance the City has (including self-insured retention), and any insurance or retention PURCHASER has shall not be required to contribute. For itself and all of its insurers, SELLER waives its right to recover against PURCHASER for liabilities for which PURCHASER has insurance. SELLER shall furnish to PURCHASER endorsements from its insurers unconditionally entitling PURCHASER to 30-days' notice of cancellation or non-renewal, except that in the case of cancellation or non-renewal due to non-payment of premiums, 10-days' notice is sufficient. SELLER shall furnish PURCHASER proof of its compliance with these insurance requirements upon demand through PURCHASER-approved means. Compliance with this section is a condition of PURCHASER'S payment to SELLER.

SELLER shall, to the fullest extent allowed by law, defend, indemnify, and hold harmless the PURCHASER, the City of Lansing, their respective officers, agents, employees and insurers against any liability, loss, damage, demand, governmental action, citation, cause of action, or expense of whatever nature (including costs of defense, settlement, court costs and attorney's fees) which may result from any loss, injury, death, or damage (including environmental harm) allegedly sustained by any person, firm, corporation, or other entity, which arises out of or is caused by any act or omission of SELLER its officers, agents, or employees in connection with or in any way arising out of this Contract. SELLER's obligations under this paragraph shall survive the expiration or termination of this Contract.

8. REMEDIES

If SELLER fails or refuses to substantially perform according to the terms of this Contract, SELLER shall be declared to be in default by the PURCHASER by a written notice and shall be given an opportunity to perform in accordance with the notice. If the default has not been corrected or begun to be corrected within the time specified in the notice, or the SELLER has ceased to pursue the correction with due diligence, the PURCHASER may elect to (a) "cover" by purchasing the chemicals from another responsible vendor at the lowest cost available to the PURCHASER, and passing any additional cost on to the SELLER, who must pay the additional costs within 30 days of invoice receipt; (b) terminate the agreement and seek damages, or (c) treat the agreement as continuing and require specific performance, or (d) avail itself of any other remedy at law or equity.

If the PURCHASER fails or refuses to substantially perform according to the terms of this Contract, the PURCHASER shall be declared to be in default by the SELLER by a written notice and shall be given an opportunity to perform in accordance with the notice. If the default has not been corrected or begun to be corrected within the time specified in the notice, or the PURCHASER has ceased to pursue the correction with due diligence, the SELLER may elect to (a) terminate the agreement and seek damages, or (b) treat the agreement as continuing and require specific performance, or (c) avail itself of any other remedy at law or equity.

9. PLANT PROTECTION AND SECURITY

- (1) If the Work requires SELLER'S employees to enter a protected or policed area of the PURCHASER, including all utility operating areas, the SELLER shall arrange, in conjunction with PURCHASER security, for visible identification badges for all SELLER personnel employed on such Work. SELLER's trucks or common carriers entering PURCHASER property are subject to inspection.
- (2) SELLER, its employees, or suppliers, shall observe traffic rules, speed regulations, or other safety rules in the operation of its vehicles and equipment on PURCHASER property, as established by PURCHASER.

- (3) SELLER's employees shall comply with the PURCHASER's "Weapons in the Workplace" policy and "Prevention of Violence in the Workplace" policy.

10. TIME AND MANNER OF PERFORMANCE

- (1) The PURCHASER's Designated Representative shall contact SELLER when a shipment of chemicals is needed. The SELLER shall deliver the chemicals within 21 days to the PURCHASER location identified by the PURCHASER's Designated Representative, unless a shorter time is specified in the bid/proposal documents. In some cases, a shipment may be split between two PURCHASER locations.
- (2) SELLER shall keep a sufficient quantity of chemicals on hand to meet the PURCHASER's demands, in accordance with the Specifications.
- (3) Any activities occurring on PURCHASER property shall be performed from 8 a.m. through 5 p.m., Monday through Friday, excluding PURCHASER holidays. If SELLER wishes to perform Work on PURCHASER property during other times, SELLER must receive express written permission from the Designated Representative.

11. REPORTING

SELLER shall provide quarterly reports to the PURCHASER, including sales per month, order fulfillment percentage, backorder reports, on time delivery tracking, and other information requested by the PURCHASER.

13. DELAY

- (1) Time is of the essence in the execution of the Work.
- (2) If SELLER fails to deliver the chemicals within 21 days after demand, or shorter time specified in the bid/proposal documents, and the delay is not caused by the PURCHASER or its agent, SELLER shall pay the PURCHASER's direct costs caused by the delay, including the need to "cover" by purchasing chemicals from another vendor, if applicable. The PURCHASER may elect to waive this penalty, in writing, by permitting a back-order of up to fourteen days past the expected delivery date.

13. GOVERNING LAW AND VENUE

- (1) The Contract Documents shall be interpreted in accordance with the laws of the State of Michigan, without regard to conflict of laws provisions.
- (2) Venue shall be in Ingham County, Michigan.

14. FORCE MAJEURE

Neither the PURCHASER nor SELLER shall be held responsible for any delay or default caused by fire, act of God, riot, terrorist act, other violent act, war, or flood where such cause was beyond the delaying or defaulting party's reasonable control. However, SELLER shall make all reasonable efforts to remove or eliminate such a cause of delay or default and shall, upon the cessation of the cause, diligently pursue performance or its obligation under this Contract. SELLER'S management of its plant operations and compliance with regulations, even if they impact SELLER'S ability to meet the contract requirements, do not constitute force majeure.

15. RIGHT TO AUDIT RECORDS

The PURCHASER shall be entitled to audit the books and records of a SELLER or under any PURCHASER contract or subcontract to the extent that such books, documents, papers and records are pertinent to the performance of such contract or subcontract. The SELLER shall maintain such books and records for a period of three years from the date of final payment under the prime contract for a period of three years from the date of final payment under the subcontract.

16. NONDISCRIMINATION

SELLER agrees not to discriminate against SELLER employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment, or a matter directly or indirectly related to employment, because of race, color, creed, religion, national origin, sex, disability, age, height, weight, veteran status, marital status, or any other reason prohibited by law. A breach of this covenant shall be considered a material breach of contract.

17. INDEPENDENT SELLER

SELLER shall be, for all purposes, an independent SELLER and not an employee or agent of the PURCHASER. SELLER shall not hold itself out as an agent of the PURCHASER or the City of Lansing.

SELLER acknowledges that PARTICIPANTS are, for all purposes, independent SELLER(S) and not an employee or agent of the PURCHASER or the City of Lansing.

18. TERMINATION FOR CONVENIENCE

The PURCHASER may also terminate this Contract for its own convenience upon thirty days written notice. If the PURCHASER terminates for convenience, however, it shall compensate SELLER for all Specification-conforming chemicals delivered to the PURCHASER.

19. CONTRACT

The final versions of the Contract Documents, taken as a whole, constitute the sole and final agreement between the parties (Contract), which can only be modified by a written document properly executed by both parties.

20. LOADING/UNLOADING

Prior to offloading any chemical, the facility personnel shall:

- Verify the Bill of Lading for the correct chemical and correct PURCHASER delivery address.
- Assure that the material is being off loaded into the correct bulk tank.
- Determine the available tank volume is sufficient for the incoming delivery.
- Require that the driver remain in line of sight of the delivery hose and bulk tank connection at all times.
- Require that the driver have the appropriate facility personal protective equipment, including but not limited to hardhat, steel toed shoes, chemical safety goggles, etc.
- Require that the driver have appropriate spill response supplies and that any storm drains in the immediate area will be protected with appropriate "drain blocker" mats or plugs prior to starting the off-loading process.

Immediately report to management any problems with driver actions, PURCHASER tank fill connections, fill valve containment, tank level indicators, secondary containment, or any other safety or environmental concern.

END OF TERMS AND CONDITIONS

1. THE RFP CONSISTS OF THE FOLLOWING ("PROPOSAL DOCUMENTS"):

- (a) Event Information ("Notice to Bidders");
- (b) Bid Attachments, including
 - (c) Instructions to Bidders
 - (d) Sworn and Notarized Affidavit of Compliance- Iran Economic Sanctions Act;
 - (e) Terms and Conditions for Water Chemicals ("BWL's Standard Terms and Conditions").
 - (f) Scope of Work
 - (g) Attachment A
 - (h) Bid Attributes;
- (c) Bid Lines ("Proposal Form"); and
- (i) Addenda, if issued.

2. TERMS AND CONDITIONS

Do not submit BIDDER's standard terms and conditions as a replacement to the BWL's Standard Terms and Conditions. BIDDER shall submit their proposal based upon the BWL's Standard Terms and Conditions as attached. BIDDER may request clarifications, tender exceptions consistent with Section 7 (or provide alternative language that corresponds to a tendered exception as provided in Section 7) to the BWL's Standard Terms and Conditions. Exceptions to the BWL's Standard Terms and Conditions must be noted on the Proposal Form in the space provided. Wholesale rejection of the BWL's Standard Terms and Conditions, as well as replacing with BIDDER'S standard terms and conditions will not receive consideration and result in a rejection in BIDDER'S proposal in its entirety. Further, proposals which are submitted and contingent upon BIDDER'S standard terms and conditions will be rejected.

3. BIDDER'S RESPONSIBILITY

It shall be the BIDDER'S responsibility to be familiar with the Proposal Documents and with the BWL, scope of work, and conditions that are likely to be encountered. BIDDER shall visit the site and specific areas on the site wherein the Work will be performed.

Any failure by the successful BIDDER to familiarize itself with conditions likely to be encountered, to acquaint itself with the available information, or to attend any meeting of BIDDERS shall not relieve the BIDDER from responsibility for providing the specified equipment, materials, and service. A failure to comply with this requirement does not constitute grounds for extra compensation over the pricing stated in the BIDDER'S proposal.

BIDDER shall be prepared to make a presentation at the BWL's request on its Proposal and to answer questions.

4. AVAILABILITY OF LABOR AND MATERIALS

The BWL will not furnish any labor, facilities, services, utilities, materials, equipment, or supplies unless specifically stated in the Proposal Documents.

BIDDER shall assess and determine the availability of necessary labor and the prevailing wages applicable to that workforce. In addition, BIDDER shall assess and determine the availability of materials and equipment necessary to fulfill the contract in a complete and timely manner. The BWL will not honor any claim for additional cost premised on the unavailability of materials or equipment, shortage of labor, or unexpected wage rates.

5. ADDENDA

The BWL will clarify any questions or correct the RFP by the issuance of an Addendum to all BIDDERS.

Each BIDDER shall acknowledge receipt of each Addendum by filling in the blank space provided on the Proposal Form.

6. DRAWINGS

The BWL will supply the BIDDER with one (1) electronic (if available) or hard copy set of pertinent BWL drawings. Additional sets and copies will be charged to the BIDDER.

BIDDER will hold all BWL drawings in confidence and protect them against disclosure. BIDDER may disclose the drawings to subcontractors for the purpose of submitting a Proposal or quotation. However, both the subcontractor and BIDDER must agree that all BWL drawings, and copies thereof, will be treated as confidential and must be returned or destroyed by BIDDER or any subcontractor upon the failure to be awarded the contract, termination of employment on the Work or completion of the Work, whichever comes first.

7. PREPARATION OF PROPOSAL FORM

The Proposal Form is included in the Proposal Documents. BIDDER shall prepare its Proposal and submit it as stated in the Notice to Bidders.

Proposals must be prepared in full accordance with the Proposal Documents. The proposal price(s) stated on the Proposal Form must include all cost provisions of the complete Scope of Work. If the BIDDER chooses to submit an alternate or take an exception to any provision contained in the Proposal Documents, the alternate or exception must be specifically stated in BIDDER'S Proposal, must reference the objectionable article of the Proposal Documents, and must propose alternate language or alternate Work. Any exception to the Proposal Documents, including any exception to the BWL's Standard Terms and Conditions must be raised in BIDDER'S Proposal as exceptions provided subsequently will not be considered. Once a purchase order has been issued, and the Acknowledgement of Purchase Order ("Acknowledgement") returned, a binding contract exists between the parties and further negotiation of terms is not permitted.

Proposals received after the time and date for receipt will not be accepted. The BIDDER is responsible for timely delivery of the Proposal at the designated location and time for receipt.

The Proposal must be signed with the full name and address of the BIDDER. Proposals received without signature will not be accepted. If the BIDDER is a co-partnership, the firm name and signature of all parties are required. If the BIDDER is a corporation, full corporate name, signature of authorized official is required. BIDDER shall certify that the person who signs the Proposal is empowered to do so by the corporation. Such certificate shall be up-to-date and current at time of the Proposal Form submittal.

A Proposal may not be modified, withdrawn, or canceled unilaterally by the BIDDER for a period of sixty (60) days following the time and date designated for the receipt of Proposals, and BIDDER so agrees in submitting the Proposal. A Proposal submission is a confirmation by the BIDDER that it is prepared to commence and complete the various stages of the work as described in the Proposal Documents.

Expenses for developing and presenting Proposals shall be the responsibility of the BIDDER. It is the BIDDER'S responsibility to ensure that no conflict of interest or other ethical concern precludes the BWL from considering BIDDER'S Proposal.

8. SUBSTITUTION

Under certain circumstances, the Proposal Documents may permit substitution of products. Those areas where substitution is permitted will be designated with the qualifying phrase or equal as may be approved by the BWL REPRESENTATIVE. If BIDDER would like to substitute a product, BIDDER must make a Proposal including the products specified in the Proposal Documents and an alternate Proposal including the proposed substitution, specifically referencing any price change based on the substitution.

BIDDER'S Proposal shall contain data to substantiate that the substitution is, in fact, equal to the products specified. Substantiating data may consist of drawings or other documents necessary or helpful to indicate any modifications resulting from use of proposed substitutions. BIDDER bears the burden of proving that the proposed substitutions meet the quality standards established in the Proposal Documents.

If BIDDER is eventually awarded a Purchase Order, the Purchase Order will indicate whether the substitution was acceptable or whether the original product must be used.

The acceptance of a substitution does not alleviate BIDDER of any contractual responsibility.

9. BONDS (IF APPLICABLE)

In accordance with state statute, MCL §129.201, the successful BIDDER will be required to furnish a payment

bond and performance surety bond, each in the amount of 100% of the contract. These bonds should accompany the Acknowledgement and must be in the form included with the Purchase Order.

10. INSURANCE

The certificates of insurance required by the Contract Documents must also accompany the Acknowledgment. All these documents should be directed to the attention of the BWL Buyer listed on the Notice to Bidders with a copy to the person designated as "BWL REPRESENTATIVE." The Purchase Order number must be indicated on the Acknowledgement, bonds, and certificates of insurance.

11. EVALUATION OF PROPOSALS

All Proposals will be sealed until the time designated on the Notice to Bidders. At the opening, the names of all BIDDERS will be made public.

To evaluate the Proposals, the BWL will consider such factors as responsiveness of proposal, price, time of completion, exceptions to the Proposal Documents, financial stability, recent and past experience, and similar factors in determining which Proposal it deems to be in its best interest. The BWL does not herein limit the methods or factors to be used for evaluation. The intent of the evaluation process is to choose the best-evaluated Proposal.

The BWL reserves the right to enter into private negotiations with the selected BIDDER(S), for further scrutiny, even though these negotiations may result in changes to the BWL specifications or to the BIDDER(S) services, price quotations, etc.

The BWL may reject any Proposal, waive irregularities or technicalities in any Proposal, and accept any Proposal in whole or in part. The BWL may cancel, in whole or in part, the entire RFP at any time prior to full execution of a contract between both parties.

12. VENDOR CYBERSECURITY QUESTIONNAIRE

For projects requiring authorized access to the BWL IT/OT Network, the BWL Vendor Cybersecurity Questionnaire will be requested from the finalists after the RFP evaluation process. The BWL Vendor Cybersecurity Questionnaire form has been included with this RFP for your reference. It is not necessary to complete the form unless contacted by the BWL Buyer after the initial RFP evaluation.

13. QUESTIONS, MEETING OF BIDDERS, AND ADDENDA

In the beginning of the bid preparation period, the BWL REPRESENTATIVE may notify each BIDDER of a Meeting of BIDDERS ("Meeting") to be held at a later date, usually during the second week of the Proposal preparation time. If a Meeting is held, BIDDERS are required to attend the Meeting to present their questions about the Proposal Documents, to receive answers to questions, to receive copies of Addenda, to participate in open discussion of the Project, and to participate in the only conducted tour of the site. The Notice of Meeting will give complete details about the Meeting and instructions regarding preparation for the Meeting

Changes, revisions, and corrections that may result from the discussions that occur during the Meeting will be confirmed by the issuance of an Addendum. Suggestions of topics for the Meeting agenda should be directed to the person designated on the Notice to Bidders.

14. CONTRACT PRICE

The contract price shall be equal to the proposal price adjusted to any price changes as agreed upon in writing by the BIDDER and the BWL.

The contract price may be modified via a change order upon mutual agreement of both parties.

15. EXECUTION OF ACKNOWLEDGMENT

The successful BIDDER shall, within twenty-four hours after issuance of the Purchase Order, return the properly executed Acknowledgment to the person designated on the Notice to Bidders. BIDDER shall certify that the person who signs the Acknowledgment is empowered to do so. Upon execution, an agreement will be deemed consummated and the documents, as specified in the list of RFP documents set forth in Section 1 herein, along with any mutually agreed written changes, shall constitute the full and binding agreement between the parties. If the properly executed Acknowledgement, along with any required bonds and insurance certificates, are not

returned within five (5) calendar days, the BWL may deem the Purchase Order rejected and offer the Purchase Order to another BIDDER without penalty.

16. CONFIDENTIALITY

All complete, in-process or conceptual work are the sole property of the BWL and may not be used without the consent of the BWL. Any product used, such as, drawings and specifications, photos, campaigns, drafts, etc. are the sole property of the BWL. All BWL information will be kept confidential at all times. The BIDDER shall not disclose to others, without the written consent of the BWL, any information concerning the service provided, the organization, its personnel, or its activities, which the BIDDER may obtain as a result of, or in connection with the performance of the services.

17. FREEDOM OF INFORMATION ACT (MCL §15.231 ET SEQ.) (FOIA)

The BWL is subject to FOIA. The BWL may be required to make available certain information submitted with your bid or Proposal available to the public if requested. This information may include comparative pricing and other data which the BIDDER may normally consider to be proprietary or confidential.

18. LOCAL PREFERENCE

Applies to bids of \$100,000 or greater only.

Businesses with an office in the BWL service area shall be given the following advantage when the BWL receives a sealed Proposal:

- (a) After the Proposals are evaluated and the best-evaluated Proposal is selected, the BWL shall determine whether the best-evaluated BIDDER is a local business.
- (b) If a local business was not selected as the best-evaluated BIDDER due entirely to its proposal price being higher than the price of the best-evaluated Proposal, the BWL shall determine whether the best-evaluated local business's Proposal was within 5% of the proposal price of the best evaluated Proposal. If so, this local business shall then have the opportunity to reduce its price to match the price of the original best-evaluated BIDDER, and upon such agreement, shall be deemed the best-evaluated Proposal.
- (c) If more than one local business is within 5% of the price of the best-evaluated Proposal and is otherwise equal to the best-evaluated Proposal, and the local business identified in (b) refuses to lower its proposal price, the same opportunity shall be afforded to the other qualifying Lansing-based businesses, in order of ascending price.

If no Lansing-based business agrees to the conditions described above, the contract shall be awarded to the person or business originally deemed the best-evaluated BIDDER.

19. LOCAL RESOURCE PREFERENCE

Utilization of local resources may be considered in the evaluation of Proposals.

20. SAFETY

Unless excepted in the Proposal, and accepted by the BWL, all BIDDERS will be required to comply with the BWL's Safety Manual. All BIDDERS should read and understand the BWL Safety Manual before submitting a Proposal. The BWL Safety Manual can be found on the BWL's website at www.lbwl.com/safetymanual.

END OF INSTRUCTIONS TO BIDDERS

Supplier Bid Response Quick Tutorial

Welcome to Electronic Bidding!

This Quick Tutorial provides instruction on navigation BWL’s platform that utilizes Ion Wave Technologies (IWT) software system, locating bid requests, and creating and submitting a bid response.

Log in to the system. Once you have logged in, the system will open to the ‘Available Bids’. (See Figure 1.)

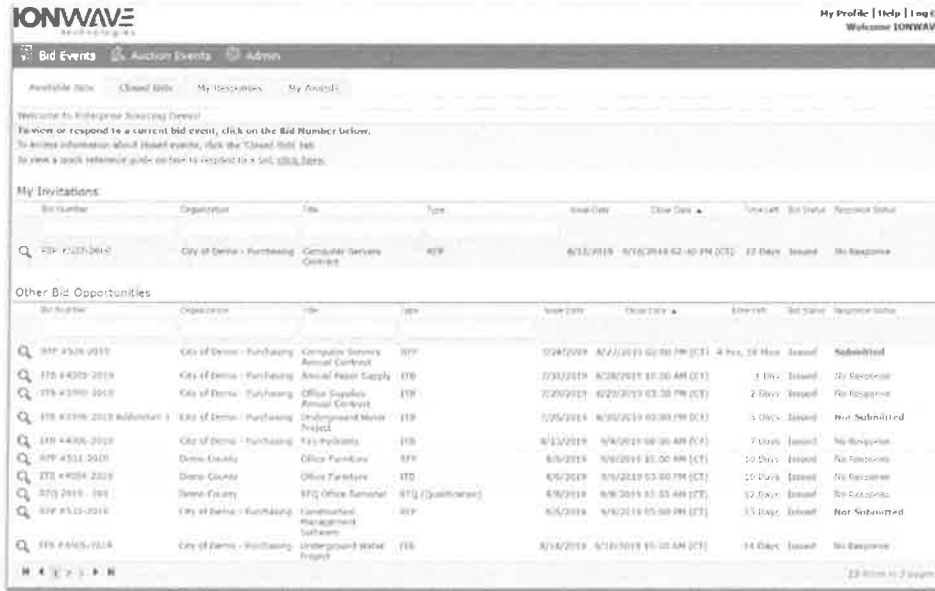


Figure 1

The available bids are displayed in to two different areas: “My Invitations” (bid events which are based on the commodity affiliated with your business) and “Other Bid Opportunities”. Click the bid number to view the bid opportunity.

NOTE: If you do not see the bid you are looking for, you can search by typing the bid number into the search boxes near the top of each section. Multiple pages of bid opportunities may exist. Click to the next page (located on the bottom of each section) to access additional pages. (See Figure 1.)

After selecting the desired bid, an *Intent to Bid* window may pop-up requesting a response of your intention to participate in the bid event. (See Figure 2).

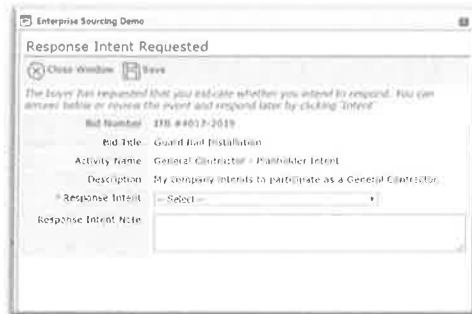


Figure 2

If you choose not to respond via the pop-up window, a reminder will appear at the top of the bid opportunity screen. You can register your intent by selecting the 'Intent' function in the top toolbar. (See Figure 3).

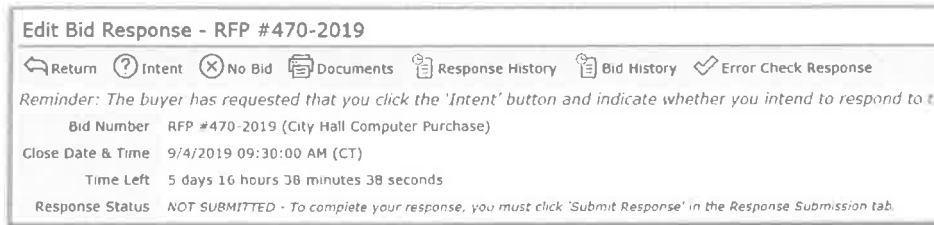


Figure 3

Once the desired bid opportunity has been selected, a series of tabs may be present. If one of the tabs listed below does not appear on your bid, then it is not applicable to the solicitation. (See Figure 4).

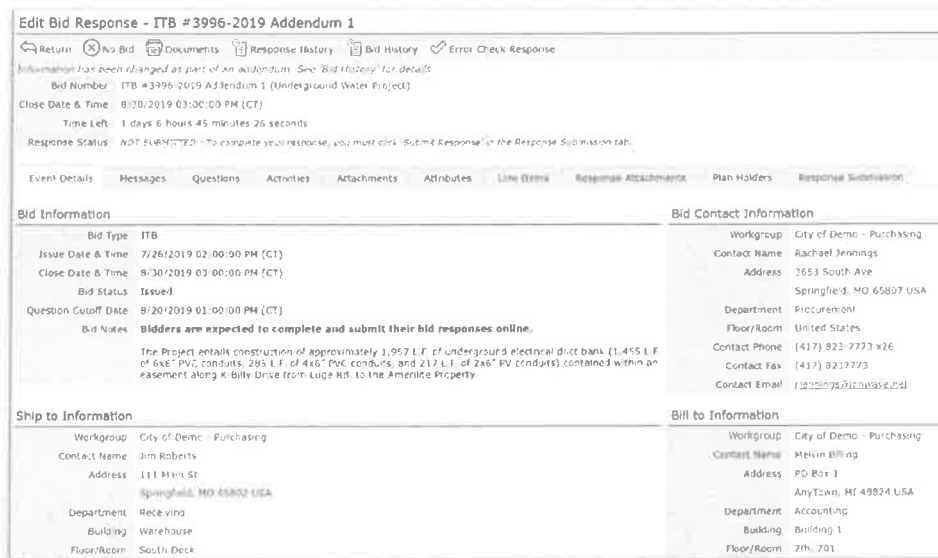


Figure 4

Event Details Tab – Information specific to the bid opportunity will be displayed on this tab, including: bid notes, contact, ship to, and bill to information.

Messages Tab – Messages sent by the buyer, specific to the bid request, will be displayed here.

Questions Tab – If this tab is displayed, you will be able to submit bid specific questions (until the Cutoff Date and Time provided) by clicking 'Ask Question.' Questions and answers provided will be reviewed at the Buyers discretion. (See Figure 3).

Activities Tab – Any events, specific to this bid opportunity, will be displayed here for you to review and respond (as applicable). Activity types may include:

- Participation Activity: activity requiring your participation
- Non-Participation Activity: activities provided for informational purposes

Attachments Tab - The buyer may include a number of attachments to the bid opportunity for a number of reasons which include, but are not limited to, the following: Informational purposes and/or to provide the supplier with a form to complete and submit as a response attachment. Do access the documents:

- Click the 'Download' function located to the left of the document.
- Open and Save the file to your desktop or another drive.

Attributes Tab – The attributes tab contains a series of questions or notes from the buyer to suppliers responding to the bid opportunity. Many of the questions will be required, and you will not be able to submit until you have responded. Here are a few additional notes covering the attributes:

- Read and/or answer all attributes.
- Required attributes have a red asterisk (*) to the right of the required field.
- A required attribute must be answered in order to submit the response.
- Click 'Save' (to save your responses)
- Click 'Error Check' (to determine if you have missed any required responses) (See Figure 6).

Line Items Tab - Enter your response in the price or percentage field provided. Click on the save button to retain your entries. Once the information has been saved, an extended price will be calculated. (See Figure 7).



Figure 5

There may be some additional responses required on the Line Items Tab. These may include the following:

- **Item Attributes** – Additional questions related to the bid line item may be included. Answer the questions, complete specification requests, and review additional terms and notes specific to the line item. (NOTE: Line attributes may not be present on the bid request). (See Figure 8).

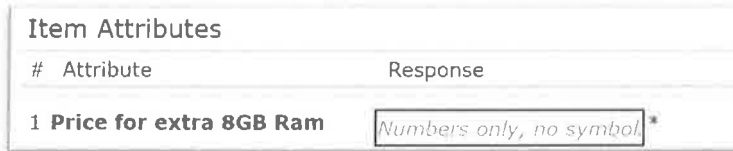


Figure 6

- **Item Attachments** – The buyer may include some additional documentation related to the bid line. Click 'Download' to access the file(s) pertaining to this line item. (NOTE: Item level attachments may not be present).
- Required fields have a red asterisk (*) to the right of the response field.
- A required field must be answered in order to submit the response.
- Click 'Save' (to save your responses).
- Click 'Error Check' (to determine if you have missed any required price fields). (See Figure 7 above).
- A line item may include one or more of the following options (See Figure 9):

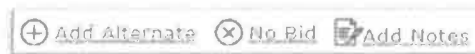


Figure 7

Add Alternates option– Where allowed, you can bid an alternate.

- Click 'Add Alternate' and enter the fields requested. (See Figure 10).



Figure 8

- If an alternate is added in error, click 'Delete Alt' on the right of the screen.

No Bid – Unless specified by the buyer, you do not have to use the 'No Bid' function at the line level. If using the 'No Bid' function, do the following:

- Click 'No Bid' (if you prefer to 'no bid' a line). (NOTE: a pop-up window will appear asking you to confirm you wish to 'no bid' the line item. Select "ok" to 'no bid' the line. (See Figure 11).

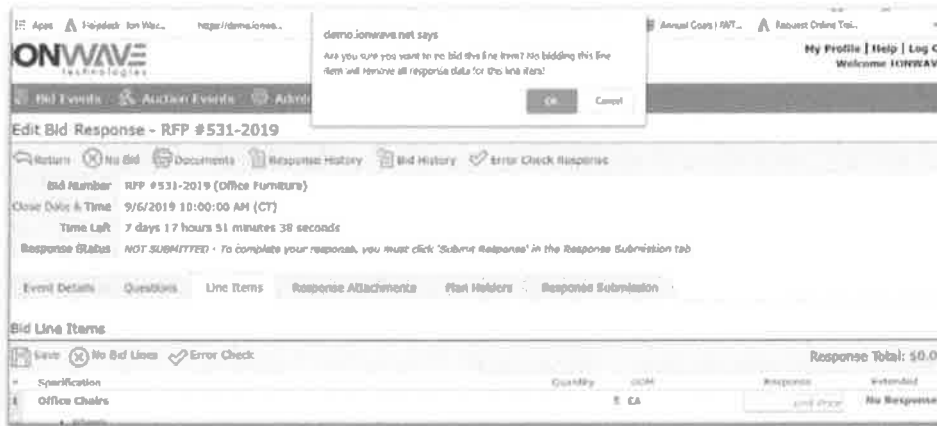


Figure 9

- To remove the 'no bid', click "Clear No Bid". (See Figure 12).

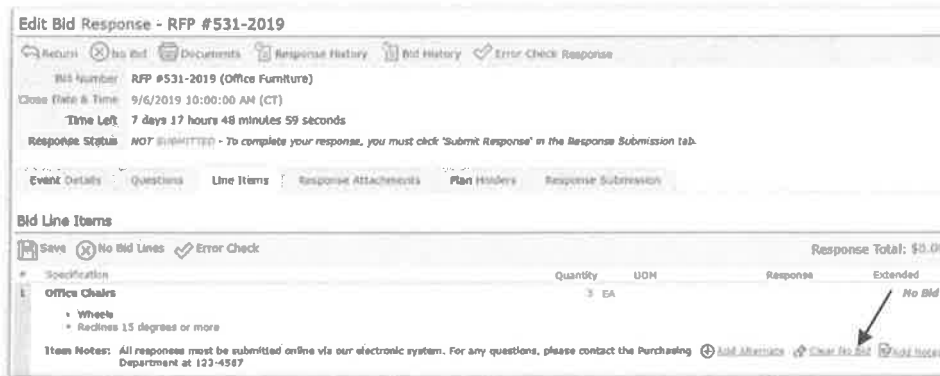


Figure 10

Add Notes – Where allowed, click 'Add Notes' to enter comments for buyer review.

Please Note: A response of zero (\$0.00) entered in the price field is defined by the buyer using one of the parameters below:

- Zero is a valid response – An extended price of \$0.00 is displayed and stored, upon save.
- Zero is considered a 'No Bid' – No Bid is displayed upon save.
- Zero is not a valid response – A response of '0' (zero) is cleared and 'No Response' is displayed, upon save.


Response Attachments Tab – The buyer may request a bidding supplier to provide documents for the buyer’s review. A red asterisk (*) located to the left of the requested file name indicates that it is required. (See Figure 13).



Figure 11

- To attach a file, click “Upload”.
- Click “Select File” in the pop-up window.
- Highlight the file to be attached and click ‘Open’.
- The file will upload, then click ‘Save’.

Other Response Attachments – Suppliers may be provided the opportunity to include additional documents for buyer review. Availability of this feature is at the buyer’s discretion. (See bottom of Figure 13). To attach an additional document,

- Other Response Attachments
- Click “New” 
 - Click “Select File” in the pop-up window
 - Highlight the file to be attached and click ‘Open’
 - A description of the file is required. Enter a description of the attached file in the space provided and click ‘Save’.

If you wish to **view** the attached document, click the **Download Button** (located at the left of the file name). To delete an attached file, select the **Delete Button** (located to the right of the file name) – Click to remove the attachment. (See Figure 14).

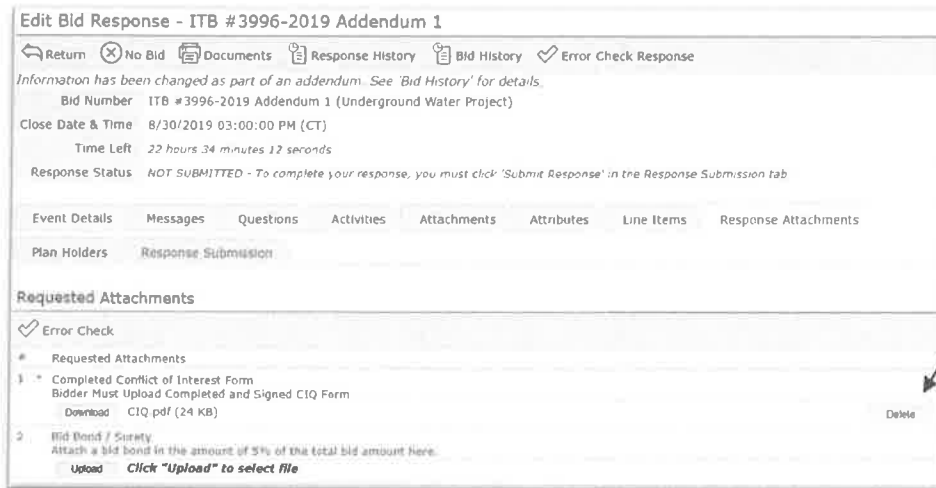


Figure 12

Please Note: If you have attached a file that requires additional editing, you must delete the attached file and attach a corrected file.

The maximum file size is 100 megabytes per file.

Plan Holders Tab – The plan holders tab contains information on suppliers who may be participating in the bid opportunity. The buyer configures the list to populate with all invited suppliers or based on supplier actions on the bid.

Response Submission – The final process in submitting a bid is located in the Response Submission tab. After completing your bid response, you must submit successfully before the close date & time of the bid event. There are several features located on the Response Submission tab:

- Supplier Note to Buyer – Allows suppliers to enter an optional note to the buyer. This field may not be available on all bids.
- Digital Signature - Enter Your Full Name & Your Email Address. Both of these fields are required to be completed.
- Click “Error Check” to determine if you have missed any required fields. (See Figure 15).

Figure 13

- Click 'Submit Response'
- A successfully submitted response will display 'Response Submitted' followed by the date and time stamp in the Response Status field. (See Figure 16).

Figure 14

Submission Errors – When an error(s) occurs, the system will display the location of error(s). In the example below, the errors occur in the Attributes tab, Response Attachments tab, and Response Submission tab. (See Figure 17).

Figure 15

- To resolve errors, you must access the tab where errors occur and complete.
- Once the errors are corrected, proceed to the Response Submission Tab to submit the response.

System Notification – An email notification will be sent to confirm response failure or response submission.

Response Retraction – This function is available at the buyer’s discretion and can be used to retract a submitted response for additional editing. (See Figure 18).

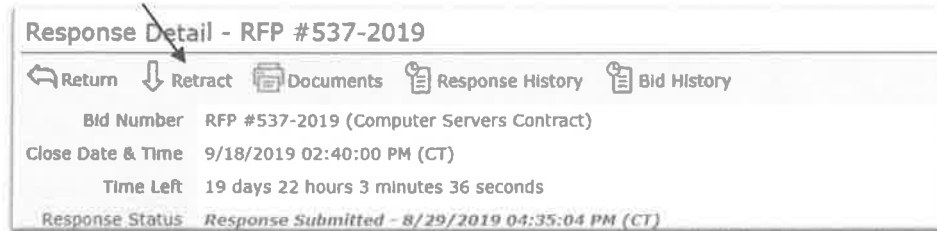


Figure 16

- From the top toolbar, select the 'Retract' function.
- Navigate to the desired tabs for editing.
- Select the Response Submission tab to 'Submit' the revised response.

Important Note: A retracted bid response is no longer considered “submitted.” The user MUST resubmit a retracted bid response to be considered.

ALEXANDER CHEMICAL CORPORATION REFERENCES

Sodium Hypochlorite

Milwaukee Water Works
3929 S. 6th Street
Howard Purification Plant
Milwaukee, WI 53211

Contact: Dan Welk, Superintendent
E-mail: daniel.welk@milwaukee.gov
Phone: (414) 286-2646

- Deliver water and wastewater treatment chemicals. October 7, 2019 - Present

City of Mishawaka
600 E Third Street
Mishawaka, IN 46544

Contact: David Majewski, Superintendent
E-mail: dmajewski@mishawaka.in.gov
Phone: 574-258-1652

- Deliver water and wastewater treatment chemicals. January 25, 2017 - Present

City of Goshen
204 E Jefferson Street
Goshen, IN 46528

Contact: Keitha Windsor, Contract and Claims Manager
E-mail: keithawindsor@goshencity.com
Phone: 574-537-3816

- Deliver water and wastewater treatment chemicals. October 30, 2015 - Present

City of Wyoming
16700 New Holland St.
Holland, MI 49424-5554

Contact: Jodi Heintzelman
Phone: 616-530-7299

- Deliver water and wastewater treatment chemicals.

City of Napoleon, OH
255 West River Avenue
Napoleon, OH 43545

Contact: Jeff Weis
Phone: (419) 599-1235

- Deliver water and wastewater treatment chemicals.



ALEXANDER CHEMICAL HFS REFERENCES

City of Battle Creek, MI
250 Brigden Dr.
Battle Creek, MI 49014
Contact: Robert Koehn
E-mail: rjkoehn@battlecreekmi.gov
Phone: (269) 966-3339
Fax: (269) 963-9222

Milwaukee Water Works, WI
3000 N. Lincoln Memorial Drive
Milwaukee, WI 53211
Contact: Dan Welk
E-mail: Daniel.welk@milwaukee.gov
Phone: (414) 286-2658
Fax: (414) 286-8653

Hammond Water Filtration, IN
925 Casino Center dr.
Hammond, IN 46320
Contact: Chuck Pietrucha
E-mail: pietruchac@gohammond.com
Phone: (219) 853-6439
Fax: (219) 473-9143

ALEXANDER

ALEXANDER CHEMICAL CORPORATION

Rockford, IL
425 S State St
Rockford, IL 61114
Contact: Sandi Leombruni
Phone: 815-987-5712

West Chicago
1400 W Hawthorne Lane
West Chicago, IL 60185
Phone: 630-738-8873

Barrington, IL
616 Bryant Ave
Barrington, IL 60010
Contact: David
Phone: 847-304-3358



ALEXANDER CHEMICAL FERRIC CHLORIDE REFERENCES

Michigan Milk
41310 Bridge Street
Novi, MI 48376
Contact: Clyde Oates
Phone: 989-834-2221

Otsego, City of
117 E. Orleans Street
Otsego, MI 49078
Contact: Luke Keyzer
Phone: 269-492-4571

Zinkan Enterprise, Inc.
1919 Case Parkway North
Twinsburg, OH 44087
Contact: Tina Reed
Phone: 800-229-6801



I, Amy Berggren, do hereby certify that I am a duly elected, qualified and acting Assistant Secretary of Carus Group Inc., a Delaware corporation, and as such have custody of the corporate records and seal.

I hereby further certify that the following resolutions were duly adopted by Unanimous Consent of the Board of Directors of Carus Group Inc. effective 1 January 2019 as of the date below pertaining to persons authorized to act for Carus Group Inc. and its member companies.

WHEREAS, the Board desires to grant to certain Carus Group officers specific spending authority necessary to the day-to-day performance of their respective functions;

IT IS FURTHER RESOLVED, that the Board hereby approves, for the purpose of signing sales contracts, municipal bids, purchase requisitions, capital expenditures, raw material supply contracts, and other day-to-day contracts and obligations of the Company, the officer spending authorizations included in the document titled "CARUS GROUP INC. AUTHORIZATION LEVELS – 1 January 2019," attached hereto as Exhibit 2.

In witness whereof I have hereunto set my hand and affixed the seal of the corporation on this 30th day of December 2022.

Amy Berggren
Asst. Secretary

SEAL



EXHIBIT 2
CARUS GROUP INC.
AUTHORIZATION LEVELS – 1 JANUARY 2019 ***

<u>TITLE</u>	<u>REVENUE CONTRACTS**</u>
Chairman	\$5,000,000
Chief Executive Officer & President *	\$5,000,000
Vice President, CFO *	\$3,000,000
Vice President, Operations	-
Global VP, Sales & Mktg., Europe	\$1,500,000
Vice Pres., Sec. & General Counsel	-
VP, Human Resources	-
VP, Corporate Development	-
VP, Finance	-
Director, Global Strategic Sourcing	-
Supply Chain Manager - EAME	-
M. Blouke Carus Fellow, VP Carus Tech	-
Plant Manager	
Business Development Director	-
Director of Finance/IT	-
Director of Sales	\$1,000,000
Global Product Manager	\$ 500,000
Director of Marketing/EHSS	-
Bid Channel Manager	\$ 200,000

NOTES:

***ANY COMMITMENT FOR THE PURCHASE OR LEASE OF GOODS OR SERVICES IN EXCESS OF A 12-MONTH PERIOD MUST BE APPROVED BY THE CHIEF EXECUTIVE OFFICER & PRESIDENT OR CFO OF CARUS GROUP INC.**

****ANY CONTRACT OR BID THAT IS EFFECTIVE FOR LONGER THAN ONE YEAR, REGARDLESS OF REVENUE VOLUME, REQUIRES THE SIGNATURE OF THE CHIEF EXECUTIVE OFFICER & PRESIDENT OR CFO OF CARUS GROUP INC.**

ANY CONTRACT OR BID THAT IS EFFECTIVE FOR MORE THAN ONE YEAR IS SUBJECT TO AN ANNUAL PRICE REVIEW, REGARDLESS OF ESCALATION CLAUSES.

*****THE APPROVALS AUTHORIZED HEREIN SHALL APPLY WITH EQUAL EFFECT TO ALL MEMBER COMPANIES OF CARUS GROUP INC., (i.e., CARUS CORPORATION, CARUS CHEMICAL COMPANY, CARUS EUROPE, CIRCLE TRANSPORT INC., ALEXANDER CHEMICAL CORPORATION).**



ALEXANDER CHEMICAL HFS REFERENCES

City of Battle Creek, MI
250 Brigden Dr.
Battle Creek, MI 49014
Contact: Robert Koehn
E-mail: rjkoehn@battlecreekmi.gov
Phone: (269) 966-3339
Fax: (269) 963-9222

Milwaukee Water Works, WI
3000 N. Lincoln Memorial Drive
Milwaukee, WI 53211
Contact: Dan Welk
E-mail: Daniel.welk@milwaukee.gov
Phone: (414) 286-2658
Fax: (414) 286-8653

Hammond Water Filtration, IN
925 Casino Center dr.
Hammond, IN 46320
Contact: Chuck Pietrucha
E-mail: pietruchac@gohammond.com
Phone: (219) 853-6439
Fax: (219) 473-9143

ALEXANDER

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Rockford, IL
425 S State St
Rockford, IL 61114
Contact: Sandi Leombruni
Phone: 815-987-5712

West Chicago
1400 W Hawthorne Lane
West Chicago, IL 60185
Phone: 630-738-8873

Barrington, IL
616 Bryant Ave
Barrington, IL 60010
Contact: David
Phone: 847-304-3358

7593 S First Road, LaPorte, IN 46350
Tel 800.348.8827, Fax 219.393.5364

Chemical Properties:

CAS#:	16961-83-4
Chemical formula:	H ₂ SiF ₆
Molecular weight:	144.06
Hydrofluosilicic acid, %:	23.00 - 25.00
Hydrofluoric acid (HF), %:	1 Maximum
Heavy metals as lead, ppm:	200.00 maximum
Color:	25 APHA maximum

Physical Properties:

Boiling point, °F:	225.00
Freezing point, °F:	- 4.00
Specific gravity @ 60 °F:	1.223 @ 25.00 %
Vapor pressure, mm Hg @ 167 °F:	218
pH:	1.2
Appearance:	White to Straw Yellow
Odor:	Sour, pungent
Solubility in water:	Complete

NSF International maximum use: 5.00 milligrams per liter

Packaged by:

Alexander Chemical Corporation
7593 South First Road
La Porte, Indiana 46350
800-348-8827

1. Identification

Product identifier	Hydrofluosilicic acid
Other means of identification	
Synonyms	Fluorosilicic acid, Hydrofluorosilicic acid
Recommended use	Hydrofluosilicic acid is an acid used in water treatment application.
Recommended restrictions	None known.

Manufacturer/Importer/Supplier/Distributor information

Company name	Alexander Chemical Corporation
Address	7593 S. First Road, Kingsbury Industrial Park, USA
Fax	219-393-5364
Website	www.alexanderchemical.com
Contact Person	Keith Bonner

Telephone (800) 348-8827 - non-emergency inquiries only

Emergency telephone number

For Hazardous Materials [or Dangerous Goods] Incidents ONLY

(spill, leak, fire, exposure or accident), call CHEMTREC at
CHEMTREC®, USA: 001 (800) 424-9300
CHEMTREC®, Mexico (Toll-Free - must be dialed from within country):
001-800-13-203-9987
CHEMTREC®, Other countries: 001 (703) 527-388

2. Hazard(s) identification

Physical hazards	Acute toxicity, oral	Category 4
Health hazards	Skin corrosion/irritation	Category 1B
	Serious eye damage/eye irritation	Category 1
	Not classified.	

OSHA defined hazards

Label elements



Signal word	Danger
Hazard statement	Harmful if swallowed. Causes severe skin burns and eye damage.
Precautionary statement	
Prevention	Do not breathe mist. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling.

Response	If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.
Storage	Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None known.

3. Composition/information on ingredients

Substances

Chemical name	Common name and synonyms	CAS number	%
Hydrofluorosilicic acid		16961-83-4	25
Water/Inactive Ingredients		7732-18-5	75

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation	Move injured person into fresh air and keep person calm under observation. Get medical attention if symptoms occur.
Skin contact	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Chemical burns must be treated by a physician.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Hold eyelids apart. Continue rinsing. Get medical attention immediately.
Ingestion	Rinse mouth thoroughly with water and give large amounts of milk or water to people not unconscious. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Obtain medical attention and take along these instructions.
Most important symptoms/effects, acute and delayed	Corrosive. Prolonged contact causes serious eye and tissue damage. May cause burns in mucous membranes, throat, esophagus and stomach. May cause lung edema. Symptoms may be delayed.
Indication of immediate medical attention and special treatment needed	In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Fire may produce irritating, corrosive and/or toxic gases.
Special protective equipment and precautions for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus. Structural firefighters protective clothing will only provide limited protection.
Fire-fighting equipment/instructions	Use standard firefighting procedures and consider the hazards of other involved materials. Use water spray to cool unopened containers. Cool containers with flooding quantities of water until well after fire is out. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Stay upwind. Keep out of low areas. Ensure adequate ventilation. Avoid contact with eyes, skin, and clothing. Avoid breathing mist or vapor. Use personal protection recommended in Section 8 of the SDS.
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Methods and materials for containment and cleaning up

Should not be released into the environment.

Large Spills: Dike far ahead of liquid spill for later disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Small Spills: Absorb spill with vermiculite or other inert material. Clean contaminated surface thoroughly. After removal flush contaminated area thoroughly with water.

Never return spills in original containers for re-use.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not contaminate water.

7. Handling and storage**Precautions for safe handling**

Handle and open container with care. Use only with adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid breathing mist or vapor. Wash thoroughly after handling. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Keep in a well-ventilated place. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep this material away from food, drink and animal feed. Use care in handling/storage. Transfer and storage systems should be compatible and corrosion resistant.

8. Exposure controls/personal protection**Occupational exposure limits****US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

Components	Type	Value
Hydrofluorosilicic acid (CAS 16961-83-4)	PEL	2.5 mg/m3

US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value	Form
Hydrofluorosilicic acid (CAS 16961-83-4)	TWA	2.5 mg/m3	Dust.

US. ACGIH Threshold Limit Values

Components	Type	Value
Hydrofluorosilicic acid (CAS 16961-83-4)	TWA	2.5 mg/m3

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Hydrofluorosilicic acid (CAS 16961-83-4)	TWA	2.5 mg/m3

Biological limit values**ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
Hydrofluorosilicic acid (CAS 16961-83-4)	3 mg/l	Fluoride	Urine	*
	2 mg/l	Fluoride	Urine	*

* - For sampling details, please see the source document.

Appropriate engineering controls

Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors. Eye wash facilities and emergency shower must be available when handling this product.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear approved safety glasses or goggles.

Skin protection**Hand protection**

Wear protective gloves. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Suitable gloves can be recommended by the glove supplier.

Other

Wear appropriate chemical resistant clothing. Protective shoes or boots. Structural firefighters protective clothing provides limited protection in fire situations ONLY; it is not effective in spill situations. Wear chemical protective equipment that is specifically recommended by the Personal Protective Equipment manufacturer.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In case of inadequate ventilation or risk of inhalation of mist, use suitable respiratory equipment with particle filter. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA 29 CFR 1910.134 and ANSI Z88.2.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product. Remove and isolate contaminated clothing and shoes. Handle in accordance with good industrial hygiene and safety practice. Launder contaminated clothing before reuse.

9. Physical and chemical properties

Appearance White to straw yellow solution.

Physical state Liquid.

Form Liquid.

Color White to straw yellow.

Odor Pungent, sour penetrating odor.

Odor threshold Not available.

pH 1.2

Melting point/freezing point -4 °F (-20 °C)

Initial boiling point and boiling range 225 °F (107.22 °C)

Flash point Not available.

Evaporation rate Not available.

Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%) Not available.

Flammability limit - upper (%) Not available.

Vapor pressure 218 mm Hg (100 °F / 38 °C)

Vapor density Not available.

Relative density 1.22 ± 0.03

Relative density temperature 77 °F (25 °C)

Solubility(ies)

Solubility (water) Completely soluble in water.

Partition coefficient (n-octanol/water) No data available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

VOC (Weight %) Not available

10. Stability and reactivity

Reactivity The product is non-reactive under normal conditions of use, storage and transport.

Chemical stability Stable at normal conditions.

Possibility of hazardous reactions Contact with metals may evolve flammable hydrogen gas.

Conditions to avoid Keep away from water, steam or other incompatible materials.

Incompatible materials Glass. Stoneware. Metals. Bases.

Hazardous decomposition products Hydrogen fluoride. Silicon tetrafluoride. Hydrogen gas.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Harmful if swallowed. Causes digestive tract burns.
Inhalation	Causes respiratory tract burns. May cause lung edema.
Skin contact	Causes severe skin burns.
Eye contact	Causes severe eye burns.

Symptoms related to the physical, chemical and toxicological characteristics Corrosive. Prolonged contact causes serious eye and tissue damage. May cause burns in mucous membranes, throat, esophagus and stomach. May cause lung edema. Symptoms may be delayed.

Information on toxicological effects

Acute toxicity Harmful if swallowed.

Components	Species	Test Results
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Hydrofluorosilicic acid (CAS 16961-83-4)

Acute

Oral

LD50	Rat	430 mg/kg
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Skin corrosion/irritation Causes severe skin burns.

Serious eye damage/eye irritation Causes severe eye damage.

Respiratory or skin sensitization

Respiratory sensitization No data available.

Skin sensitization No data available.

Germ cell mutagenicity No data available.

Carcinogenicity No data available.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity No data available.

Specific target organ toxicity - single exposure No data available.

Specific target organ toxicity - repeated exposure No data available.

Aspiration hazard No data available.

Chronic effects Prolonged overexposure to fluorides may increase fluoride content of bones and teeth, and may result in fluorosis, with mottling of teeth (in children) and brittleness of bones. Absorbed fluoride can cause metabolic imbalances with irregular heartbeat, nausea, dizziness, vomiting and seizures. Risk of hypocalcemia with nervous problems (tetany) and cardiac arrhythmia.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability No data available.

Bioaccumulative potential No data available.

Mobility in soil The product is water soluble and may spread in water systems.

Other adverse effects The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Dispose of contents/container in accordance with local/regional/national/international regulations. Dispose in accordance with all applicable regulations.

Hazardous waste code D002: Waste Corrosive material [pH <=2 or >=12.5, or corrosive to steel]
Waste codes should be assigned by the user based on the application for which the product was used.

Waste from residues / unused products Dispose of in accordance with local regulations.

Contaminated packaging Dispose of in accordance with local regulations. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

UN number UN1778
UN proper shipping name Fluorosilicic acid
Transport hazard class(es)
Class 8
Subsidiary risk -
Label(s) 8
Packing group II
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Special provisions A6, A7, B2, B15, IB2, N3, N34, T8, TP2, TP12
Packaging exceptions None
Packaging non bulk 202
Packaging bulk 242

DOT BULK

BULK

UN number UN1778
UN proper shipping name Fluorosilicic acid
Transport hazard class(es)
Class 8
Label(s) 8
Packing group II
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.
Special provisions A6, A7, B2, B15, IB2, N3, N34, T8, TP2, TP12
Packaging exceptions None
Packaging non bulk 202
Packaging bulk 242

IATA

UN number UN1778
UN proper shipping name Fluorosilicic acid
Transport hazard class(es)
Class 8
Subsidiary risk -
Label(s) Packing 8
group Environmental II
hazards ERG Code No.
8L
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

IMDG

UN number UN1778
UN proper shipping name FLUOROSILICIC ACID
Transport hazard class(es)
Class 8
Subsidiary risk -
Label(s) Packing 8
group Environmental II
hazards
Marine pollutant No.
EmS F-A, S-B
Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code This product is a liquid and when transported in bulk is covered under MARPOL 73/78 Annex II.
This product is listed in the IBC Code.
Ship type: 3
Pollution category: Y

15. Regulatory information

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - Yes

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical Yes

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US. Massachusetts RTK - Substance List

Hydrofluorosilicic acid (CAS 16961-83-4)

US. New Jersey Worker and Community Right-to-Know Act

Hydrofluorosilicic acid (CAS 16961-83-4)

US. Pennsylvania Worker and Community Right-to-Know Law

Hydrofluorosilicic acid (CAS 16961-83-4)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 25-July-2014
Revision date Revision date: 6/20/22
Version # 02

NFPA ratings**References**

Registry of Toxic Effects of Chemical Substances (RTECS)
GESTIS Substance Database
US. IARC Monographs on Occupational Exposures to Chemical Agents

Disclaimer

The information contained herein is accurate to the best of our knowledge. However, data, safety standards and government regulations are subject to change and, therefore, holders and users should satisfy themselves that they are aware of all current data and regulations relevant to their particular use of product. ALEXANDER CHEMICAL CORPORATION DISCLAIMS ALL LIABILITY FOR RELIANCE ON THE COMPLETENESS OR ACCURACY OR THE INFORMATION INCLUDED HEREIN. ALEXANDER CHEMICAL CORPORATION MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PARTICULAR USE OR PURPOSE OF THE PRODUCT DESCRIBED HEREIN. All conditions relating to storage, handling, and use of the product are beyond the control of Alexander Chemical Corporation, and shall be the sole responsibility of the holder or user of the product.



The Public Health and Safety Organization

NSF Product and Service Listings

These NSF Official Listings are current as of **Wednesday, June 15, 2022** at 12:15 a.m. Eastern Time. Please contact NSF to confirm the status of any Listing, report errors, or make suggestions.

Alert: NSF is concerned about fraudulent downloading and manipulation of website text. Always confirm this information by clicking on the below link for the most accurate information:

<http://info.nsf.org/Certified/PwsChemicals/Listings.asp?Company=17460&Standard=060&>

NSF/ANSI/CAN 60 Drinking Water Treatment Chemicals - Health Effects

Alexander Chemical Corporation

7593 South First Road
Kingsbury Industrial Park
Kingsbury, IN 46345
United States
800-348-8827
219-393-5558

Facility : Kingsbury, IN

Ammonia, Anhydrous

Trade Designation

Anhydrous Ammonia

Product Function

Chloramination

Max Use

5 mg/L

Ammonium Hydroxide

Trade Designation

Ammonium Hydroxide

Product Function

Chloramination

Max Use

10 mg/L

Chlorine[CL]

Trade Designation

Chlorine

Product Function

Disinfection & Oxidation

Max Use

30 mg/L

[CL] The residual levels of chlorine (hypochlorite ion and hypochlorous acid), chlorine dioxide, chlorate ion, chloramine and disinfection by-products shall be monitored in the finished drinking water to ensure compliance to all applicable regulations.

Hydrofluosilicic Acid

Trade Designation

Fluosilicic Acid - Water Treatment Grade
Hydrofluosilicic Acid - Water Treatment Grade

Product Function

Fluoridation
Fluoridation

Max Use

5 mg/L
5 mg/L

Sodium Bisulfite[1]

Trade Designation

Sodium Bisulfite Solution, 38%

Product Function

Dechlorination

Max Use

46mg/L

[1] This product contains sulfite.

Sulfites have been known to cause potentially lethal allergic reactions in sulfite-sensitive individuals.

The maximum recommended allowable

residual sulfite level in the finished drinking water is 100 ppb (0.1 mg/L).

Sodium Hydroxide

Trade Designation

Caustic Soda-Liquid

Product Function

Corrosion & Scale Control
pH Adjustment

Max Use

100 mg/L

Sodium Hydroxide-Liquid (Diaphragm Cell)

Corrosion & Scale Control
pH Adjustment

100 mg/L

Sodium Hydroxide-Liquid (Membrane Cell)

Corrosion & Scale Control
pH Adjustment

100 mg/L

Sodium Hypochlorite[HY]

Trade Designation

12.5% Sodium Hypochlorite
Liquid Bleach
Liquid Bleach 15%
Sodium Hypochlorite 12.5%
Sodium Hypochlorite 15%

Product Function

Disinfection & Oxidation
Disinfection & Oxidation
Disinfection & Oxidation
Disinfection & Oxidation
Disinfection & Oxidation

Max Use

84mg/L
84 mg/L
67mg/L
84 mg/L
67mg/L

[HY] The residual levels of chlorine (hypochlorite ion and hypochlorous acid), chlorine dioxide, chlorate ion, chloramine and disinfection by-products shall be monitored in the finished drinking water to ensure compliance to all applicable regulations. Also, reference the AWWA B300 (Hypochlorites) standard's Recommendations for the Handling and Storage of Hypochlorite Solutions appendix for information on preservation techniques for hypochlorite bleach in transit and storage.

Sulfuric Acid

Trade Designation

Sulfuric Acid

Product Function

Corrosion & Scale Control

Max Use

50 mg/L

Number of matching Manufacturers is 1

Number of matching Products is 15

Processing time was 0 seconds